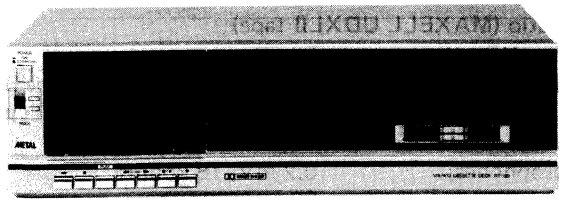
SHARP

SERVICE MANUAL/SERVICE-ANLEITUNG/MANUEL DE SERVICE

S1506RT-320HS



RT-320H(S)

DOLBY B-C NR ®

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- In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.
- Im Interesse der Benutzer-Sicherheit sollte dieses Gerät wieder auf seinen ursprünglichen Zustand eingestellt und nur die vorgeschriebenen Teile verwendet werden.
- Dans l'intérêt de la sécurité de l'utilisateur, l'appareil devra être reconstitué dans sa condition première et seules des pièces identiques à celles spécifiées, doivent être utilisées.

Note for users in UK
Recording and playback of any material may require consent which SHARP is unable to give. Please refer particularly to the provisions of Copyright Act 1956, the Dramatic and Musical Performers Protection Act 1958, the Performers Protection Acts 1963 and 1972 and to any subsequent statutory enactments and orders.

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INHALTSVERZEICHNIS

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SHARP CORPORATION

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FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SPECIFICATIONS

Power source:	AC 110 V/220 V/240 V/, 50/60 Hz
Power consumption:	14 W
Semiconductors:	5 ICs
	12 Transistors
	7 Diodes
	12 LEDs
Dimensions:	Width; 430 mm (17")
	Height; 119 mm (4-11/16")
	Depth; 213 mm (8-3/8")
Weight:	3.5 kg (7.7 lbs.)
Tape:	Compact cassette tape
Tape speed:	4.75 cm/sec. (1-7/8 ips.)
Wow & flutter:	0.09% (WRMS)
	0.16% (DIN 45 511)
Frequency response:	
Normal tape;	40 Hz – 12,000 Hz (DIN 45 511)
	50 Hz – 11,000 Hz ± 3 dB
MAXELL UDXLII tape;	40 Hz – 13,000 Hz (DIN 45 511)
	50 Hz – 12,000 Hz ± 3 dB
TDK Metal tape;	40 Hz – 16,000 Hz (DIN 45 511)
	50 Hz – 13,000 Hz ± 3 dB
S/N ratio (MAXELL UDXLII tape):	
Dolby NR off;	56 dB
Dolby NR effect;	10 dB (at over 5 kHz, Type B)
	20 dB (1 kHz to 10 kHz, Type C)
Input sensitivity and input impedance:	
Microphones;	0.2 mV, 18 kohms
Line In;	50 mV, 50 kohms
DIN In;	0.63 mV, 18 kohms
Output level and loaded impedance:	
Headphones;	0.2 mW ("0" dB), 8 ohms
Line Out;	550 mV ("0" dB), 50 kohms
DIN Out;	550 mV ("0" dB), 50 kohms

Specifications for this model are subject to change without prior notice.

NAMES OF PARTS

1. Reverse Mode Selector Switch
2. Power Switch
3. Cassette Holder
4. Digital Tape Counter and Tape Counter Reset Button
5. Tape Travel Indicators
6. Sharpscan Peak Level Display Meters
7. Headphones Jack
8. Record Level Controls
9. Tape Selector Switches
10. Dolby NR Switches
11. Microphone Jacks
12. Pause Button
13. Stop/Eject Button
14. Fast Wind Buttons
15. Play Button
16. Record Button
17. Tape Travel Direction Button
18. Line Output Jacks
19. Line Input Jacks
20. Input Selector Switch
21. DIN Record/Playback Socket
22. AC Power Supply Cord
23. AC Voltage Selector

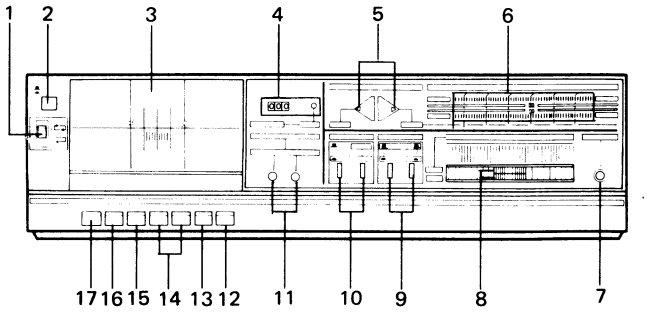

Figure 2–1

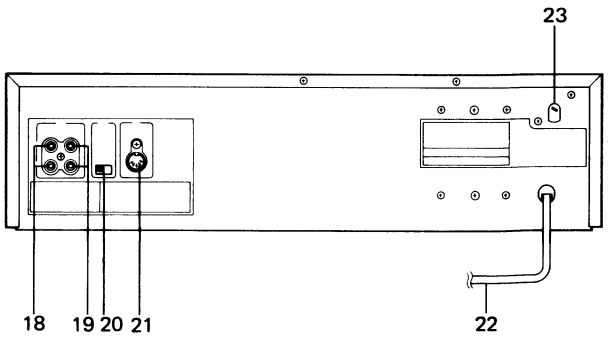

Figure 2–2

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EINE VOLLSTÄNDIGE BESCHREIBUNG DER BEDIENUNG DIESES GERÄTES IST IN DER BEDIENUNGSANLEITUNG ENTHALTEN.

TECHNISHE DATEN

Spannungsversorgung:	Netzspannung 110 V/220 V/240 V, 50/60 Hz
Leistungsaufnahme:	14 W
Bestückung:	5 ICs 12 Transistoren 7 Dioden 12 LEDs
Abmessungen:	Breite; 430 mm Höhe; 119 mm Tiefe; 213 mm
Gewicht:	3,5 kg
Band:	Kompaktcassettenband
Bandgeschwindigkeit:	4,75 cm/s
Gleichlaufschwankungen:	0,09% WRMS 0,16% (DIN 45 511)
Frequenzgang:	
Normalband;	40 Hz – 12 000 Hz (DIN 45 511) 50 Hz – 11 000 Hz ± 3 dB
MAXELL-UDXLII-Band;	40 Hz – 13 000 Hz (DIN 45 511) 50 Hz – 12 000 Hz ± 3 dB
TDK-Reineisenband;	40 Hz – 16 000 Hz (DIN 45 511) 50 Hz – 13 000 Hz ± 3 dB
Geräuschspannungsabstand (MAXELL-UDXLII-Band)	
Dolby-Geräuschunterdrückungsschaltung ausgeschaltet;	56 dB
Mit Dolby-Geräuschunterdrückungseffekt;	10 dB (bei über 5 kHz, Typ B) 20 dB (1 kHz bis 10 kHz, Typ C)
Eingangsempfindlichkeit und-impedanz:	
Mikrofoneingang;	0,2 mV, 18 kiloohm
Direkteingang;	50 mV, 50 kiloohm
DIN-Eingang;	0,63 mV, 18 kiloohm
Ausgangspegel und Lastimpedanz:	
Kopfhörerausgang;	0,2 mW ("0" dB), 8 ohm
Direktausgang;	550 mV ("0" dB), 50 kiloohm
DIN-Ausgang;	550 mV ("0" dB), 50 kiloohm

Die technischen Daten für dieses Modell können ohne vorherige Ankündigung Änderungen unterworfen sein.

BEZEICHNUNG DER TEILE

1. Bandumkehrwahlschalter
2. Netzschalter
3. Cassettenfach
4. Digitales Bandzählwerk und Bandzählwerk-Rückstelltaste
5. Bandlaufrichtungsanzeigen
6. Sharpscan-Spitzenwertanzeige
7. Kopfhörerstecker
8. Aufnahmepegelsteller
9. Bandsortenwahlschalter
10. Dolby-NR-Schalter
11. Mikrofonstecker
12. Pausentaste
13. Stopp-/Auswurftaste
14. Schnellumspultasten
15. Wiedergabetaste
16. Aufnahmetaste
17. Bandlaufrichtungstaste
18. Direktausgangsstecker
19. Direkteingangsstecker
20. Eingangswahlschalter
21. DIN-Anschluß für Aufnahme/Wiedergabe
22. Netzkabel
23. Netzspannungswähler

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POUR LA DESCRIPTION COMPLÈTE DU FONCTIONNEMENT DE CET APPAREIL, SE REPORTER AU MODE D'EMPLOI.

CARACTÉRISTIQUES

Alimentation:	CA 110 V/220 V/240 V, 50/60 Hz
Consommation:	14 W
Semi-conducteurs:	5 CI 12 transistors 7 diodes 12 LED
Dimensions:	Largeur; 430 mm Hauteur; 119 mm Profondeur; 213 mm
Poids:	3,5 kg
Bande:	Bande cassette compacte
Vitesse de la bande:	4,75 cm/s
Pleurage et scintillement:	0,09% WRMS 0,16% (DIN 45 511)
Réponse de fréquence:	
Bande normale;	40 Hz à 12 000 Hz (DIN 45 511) 50 Hz à 11 000 Hz ± 3 dB
Bande MAXELL UDXLII;	40 Hz à 13 000 Hz (DIN 45 511) 50 Hz à 12 000 Hz ± 3 dB
Bande métallique TDK;	40 Hz à 16 000 Hz (DIN 45 511) 50 Hz à 13 000 Hz ± 3 dB
Rapport S/B (Bande MAXELL UDXLII):	
Dolby NR coupe;	56 dB
Effet Dolby NR;	10 dB (à plus de 5 kHz, Type B) 20 dB (1 kHz à 10 kHz, Type C)
Sensibilité d'entrée et impédance d'entrée:	
Microphone;	0,2 mV, 18 kohms
Entrée de ligne;	50 mV, 50 kohms
Entrée DIN;	0,63 mV, 18 kohms
Niveau de sortie et impédance de charge:	
Casque;	0,2 mW ("0" dB), 8 ohms
Sortie de ligne;	550 mV ("0" dB), 50 kohms
Sortie DIN;	550 mV ("0" dB), 50 kohms

Les caractéristiques de ce modèle sont sujettes à modification sans préavis.

NOMENCLATURE

1. Commutateur de sélection d'inversion
2. Commutateur d'alimentation
3. Compartiment de la cassette
4. Compteur numérique de bande et bouton de remise à zéro du compteur de bande
5. Témoins de direction de défilement de la bande
6. Compteurs d'affichage de niveau de crête Sharpscan
7. Jack de casque
8. Commandes de niveau d'enregistrement
9. Commutateurs de sélection de bande
10. Commutateurs Dolby NR
11. Jacks de microphone
12. Bouton de pause
13. Bouton d'arrêt/éjection
14. Boutons de bobinage rapide
15. Bouton de lecture
16. Bouton d'enregistrement
17. Bouton de direction de défilement de la bande
18. Jacks de sortie de ligne
19. Jacks d'entrée de ligne
20. Commutateur de sélection d'entrée
21. Douille DIN d'enregistrement/lecture
22. Cordon d'alimentation
23. Sélecteur de tension de secteur

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DISASSEMBLY

Caution on Disassembly
Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep its safety and excellent performance:

1. Take cassette tape out of the cassette holder.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

STEP	REMOVAL	PROCEDURE	FIGURE
1	Cabinet	1. Screw . . . . . (A)x6	4–1
2	Bottom Plate	1. Screw . . . . . (B)x1	4–2
3	Cassette Deck Mechanism	1. Tape counter drive belt . . . (C) 2. Record/Playback selector rod . . . . . (D) 3. Socket . . . . . (E)x4 4. Open the cassette holder . . (F)	4–3
		5. Screw . . . . . (G)x5	4–2, 4–3
4	Front Panel	1. Rod . . . . . (H)x1	4–3
		2. Screw . . . . . (I)x6	4–2, 4–3

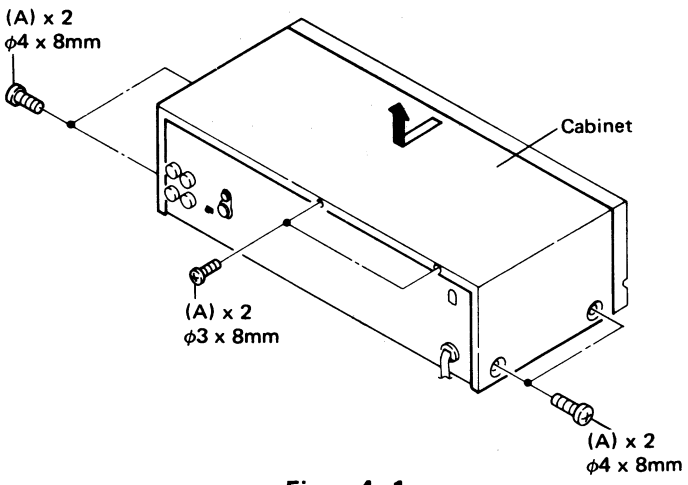

Figure 4–1

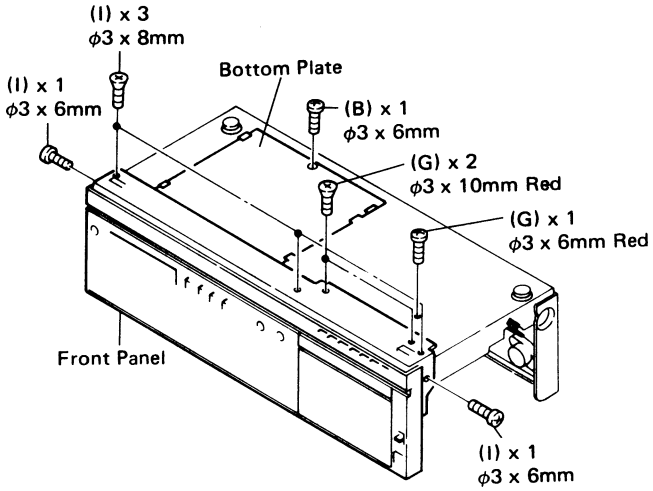

Figure 4–2

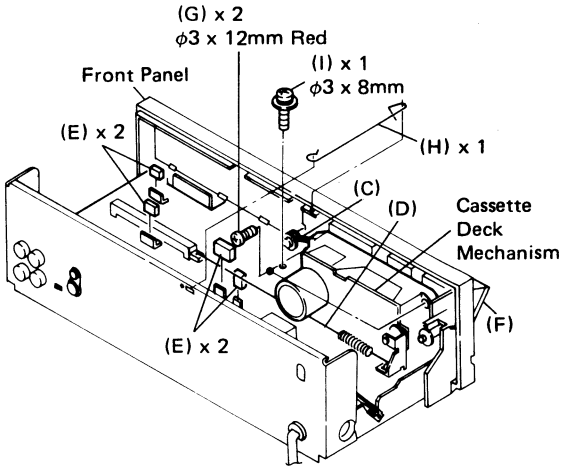

Figure 4–3

VOLTAGE SELECTION

The voltage selector is located on the rear of the unit. If adjustment is necessary, use a screwdriver in order to turn the selector in either direction until the correct voltage figure is displayed in the window next to the adjustment screw.

Ⓓ ZERLEGEN

Vorsichtsmassregeln für das zerlegen

Beim Zerlegen und Zusammenbauen des Gerätes die folgenden Anweisungen befolgen, um dessen Betriebssicherheit und ausgezeichnete Leistung aufrechtzuerhalten.

1. Cassette aus dem cassettenhalter entfernen.
2. Bevor mit dem Zerlegen des Gerätes begonnen wird, unbedingt den Netzkabelstecker aus der Netzsteckdose ziehen.
3. Nylonbänder oder Leitungshalter entfernen, falls dies beim Zerlegen des Gerätes erforderlich ist. Nach Warten des Gerätes darauf achten, die Leitungen wieder so zu verlegen, wie sie vor dem Zerlegen angeordnet waren.
4. Beim Ausführen von Wartungsarbeiten auf statische Elektrizität der integrierten Schaltkreise und anderen Schaltungen achten.

SCHRITT	ENTFERNEN	VERFAHREN	ABBILDUNG
1	Gehäuse	1. Schraube . . . . . (A)x6	4–1
2	Bodenplatte	1. Schraube . . . . . (B)x1	4–2
3	Cassettendeck-laufwerk	1. Bandzählwerk-Antriebsriemen . . . . . (C) 2. Aufnahme-/Wiedergabe-Wahlschalterstab . . . . . (D) 3. Buchse . . . . . (E)x4 4. Cassettenhalter öffnen . . . (F)	4–3
		5. Schraube . . . . . (G)x5	4–2, 4–3
4	Frontplatte	1. Stab . . . . . (H)x1	4–3
		2. Schraube . . . . . (I)x6	4–2, 4–3

Ⓕ DÉMONTAGE

Précautions pour le démontage

Lors du démontage de l'appareil et de son remontage, suivre les précautions ci-dessous, pour maintenir la sécurité et d'excellentes performances.

1. Déposer la bande cassette du porte-cassette.
2. S'assurer de retirer la fiche d'alimentation secteur de la prise murale avant de démarrer le démontage de l'appareil.
3. Déposer les bandes de nylon ou les serre-câbles si nécessaire lors du démontage de l'appareil. Après la réparation de l'appareil, s'assurer de redisposer les fils tel qu'ils étaient avant le démontage.
4. Faire attention à l'électricité statique des circuits intégrés et des autres circuits lors de la réparation.

ÉTAPE	DÉPOSE	PROCÉDÉ	FIGURE
1	Coffret	1. Vis . . . . . (A)x6	4–1
2	Plaque de base	1. Vis . . . . . (B)x1	4–2
3	Mécanisme du magnétophone	1. Courroie d'entraînement du compteur de bande . (C) 2. Tige de sélection enregistrement/lecture . . . . . (D) 3. Douille . . . . . (E)x4 4. Ouvrir le porte-cassette . . (F)	4–3
		5. Vis . . . . . (G)x5	4–2, 4–3
4	Panneau avant	1. Barre . . . . . (H)x1	4–3
		2. Vis . . . . . (I)x6	4–2, 4–3

SPANNUNGSWAHL

Der Spannungswähler befindet sich an der Rückseite des Gerätes. Falls eine Änderung der Spannung norwendig sein sollte, benutzen Sie dazu einen Schraubenzieher. Drehen Sie den Spannungswähler in beliebiger Richtung, bis die gewünschte Spannungszahi im Fenster neben der Einstellschraube erscheint.

SÉLECTION DE LA TENSION

Le Sélecteur de tension est situé sur le panneau arrière de l'appareil. Si le réglage est nécessaire, utiliser un tournevis pour tourner le sélecteur dans un sens ou dans l'autre jusqu'à ce que le chiffre de la tension appropriée soit affiché dans la fenêtre voisine de la vis de réglage.

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MECHANICAL ADJUSTMENT

- For the details of the test tapes used for the measurement, refer to the Table "TEST TAPES FOR MEASUREMENT" on page 15.

ITEM	JIG	ADJUSTMENT POINTS	REMARKS (CHECK)
Pinch roller pressure	Tension gauge (500 g)	Pinch roller pressure spring	Play, Forward: 350 – 420 g Play, Reverse: 300 – 370 g * If the reading is outside the range, replace the pressure spring of the pinch roller.
Driving power	Tape tention measuring cassette Play, Forward TW-2412 Play, Reverse TW-2422	—	(More than 150 g)
Torque	Torque meter Play, Forward TW-2111 Play, Reverse TW-2121 Fast-forward TW-2231 Rewind TW-2231	—	(Play, Forward: 35 – 60 g-cm) (Play, Reverse: 35 – 60 g-cm) (Fast forward: 85 – 125 gcm) (Rewind: 85 – 125 gcm)
Azimuth	Test tape MTT-114	Azimuth adjusting screw *1 ① Reverse ② Forward	Sine waveform attains the maximum.
Tape speed	Test tape MTT-111	Variable resistor on motor	$3{,}000\ ^{+10}_{-30}$ Hz

*1. To perform the azimuth adjustment, adjust the reverse playback screw first and then the forward playback screw.

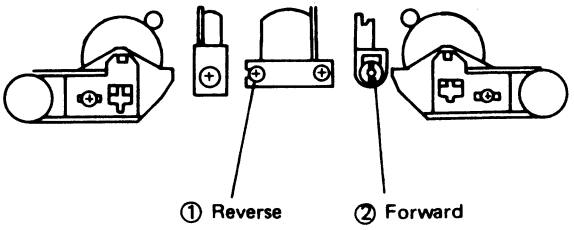

Figure 6–1 PINCH ROLLER PRESSURE AND AZIMUTH POINT

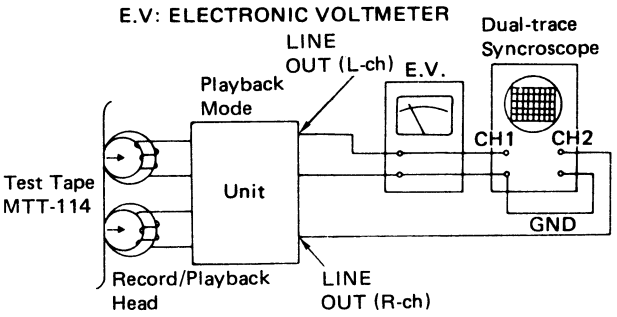

Figure 6–2 AZIMUTH

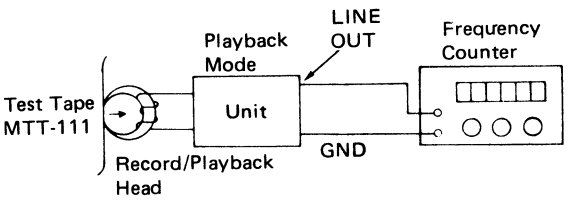

Figure 6–3 TAPE SPEED

Ⓓ MECHANISCHE EINSTELLUNG

- Einzelheiten über die Testbänder für die Messung sind aus der Tabelle "TESTBÄNDER FÜR MESSUNG" auf Seite 16 ersichtlich.

BE-NENNUNG	FÜHRUNG-SLEHRE	EINSTELL-PUNKT	BEMERKUNGEN (PRÜFUNG)
Andruck-rollen-druck	Federwaage (500 g)	Andruckrol-lendruckftder	Wiedergabe, Vorwärts: 350 – 420 g Wiedergabe, Gegenrichtung: 300 – 370 g * Wenn ein anderer Wert angezeigt wird, die Druck-feder der Andruckrolle auswechseln.
Antriebs-kraft	Bandzug-Meßcassette Wiedergabe, Vorwärts: TW-2412 Wiedergabe, Gegenrichtung: TW-2422	—	(Mehr als 150 g)
Dreh-moment	Drehmoment-messer Wiedergabe, Vorwärts: TW-2111 Wiedergabe, Gegenrichtung: TW-2121 Schnellvorlauf: TW-2231 Rückspulung: TW-2231	—	(Wiedergabe, Vorwärts: 35 – 60 g-cm) (Wiedergabe, Gegenrichtung: 35 – 60 g-cm) (Schnellvorlauf: 85 – 125 g-cm) (Rückspulung: 85 – 125 g-cm)
Azimut	Testband MTT-114	Azimuteinstell-schraube *1 ① Gegen-richtung ② Vorwärts	Sinuswellenform wird maximal.
Bandge-schwin-digkeit	Testband MTT-111	Stellwiderstand am Motor	3000^{+10}_{-30} Hz

*1. Um die Azimuteistellung durchzuführen, zuerst die Bandumkehrwiedergabeschraube und dann die Vor-alufwiedergabeschraube einstellen.

Ⓕ RÉGLAGE MÉCANIQUE

- Pour les détails sur les bandes d'essai utilisées pour mesurage, se référer au Tableau "BANDES D'ESSAI POUR MESURAGE" à la page 16.

ARTICLE	GABARIT	POINTS DE RÉGLAGE	REMARQUES (VÉRIFICATION)
Pression du galet pinceur	Jauge de tension (500 g)	Ressort de pression du galet pinceur	Lecture, Avance: 350 – 420 g Lecture, Retour: 300 – 370 g * Si l'indication par la jauge est hors de la gamme, remplacer le ressort de pression du galet pinceur.
Puissance d'entraîne-ment	Cassette de mesure de tension de la bande Lecture, Avance: TW-2412 Lecture, Retour: TW-2422	—	(Plus de 150 g)
Couple	Compteur de couple Lecture, Avance: TW-2111 Lecture, Retour: TW-2121 Avance rapide: TW-2231 Rebobinage: TW-2231	—	(Lecture, Avance: 35 à 60 g-cm) (Lecture, Retour: 35 à 60 g-cm) (Avance rapide: 85 à 125 g-cm) (Rebobinage: 85 à 125 g-cm)
Azimuth	Bande d'essai MTT-114	Vis de réglage de l'azimuth *1 ① Retour ② Avance	Sinusoïdale atteint le maximum.
Vitesse de la bande	Bande d'essai MTT-111	Résistance variable sur le moteur	$3{,}000^{+10}_{-30}$ Hz

*1. Pour effectuer le réglage d'azimut, ajuster d'abord la vis de lecture en retour et puis la vis de lecture d'avance.

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CIRCUIT ADJUSTMENT

SETTING POSITION OF SWITCH AND KNOB	• Tape Selector Switch: Normal • Dolby NR Switch: off • Input Selector Switch: Line		
ITEM	**INPUT**	**ADJUSTMENT POINT**	**REMARKS (CHECK)**
BIAS OSCILLATION FREQUENCY	———	L303	Metal: 85 ± 2 kHz
BIAS VOLTAGE	———	L: VR301 R: VR302	Normal: 15.0 V (CrO_2: 23.5 ± 2 V) (Metal: 31 ± 3 V)
ERASE VOLTAGE	———	———	Metal: 32.0 ± 4 V
PLAYBACK SENSITIVITY	Test tape MTT-150	L: VR101 R: VR201	Normal: 540 mV
RECORD/PLAYBACK SENSITIVITY	Non-recorded tape (MTT-502) 400 Hz, −13 dB (1 V = 0 dB)	L: VR103 R: VR203	1. Adjust the record level knobs so that the electronic voltmeter reads 350 mV. 2. Playback the normal tape recorded and adjust the semi-variable resistor so that the electronic voltmeter reads 340 – 430 mV.

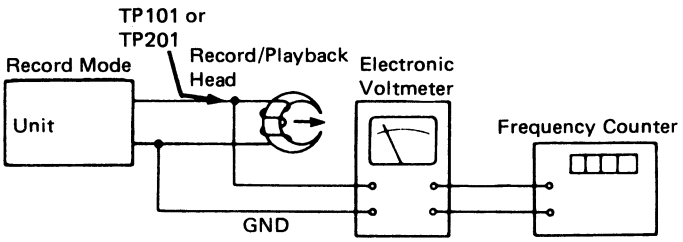


Figure 8–1 BIAS OSCILLATION FREQUENCY/BIAS VOLTAGE

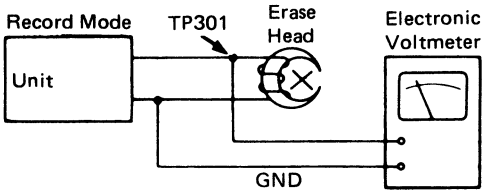


Figure 8–2 ERASE VOLTAGE

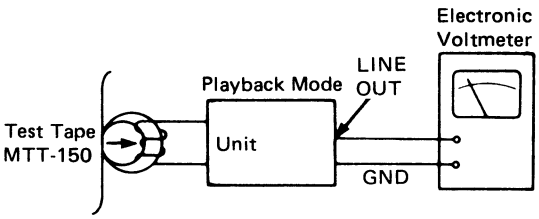


Figure 8–3 PLAYBACK SENSITIVITY

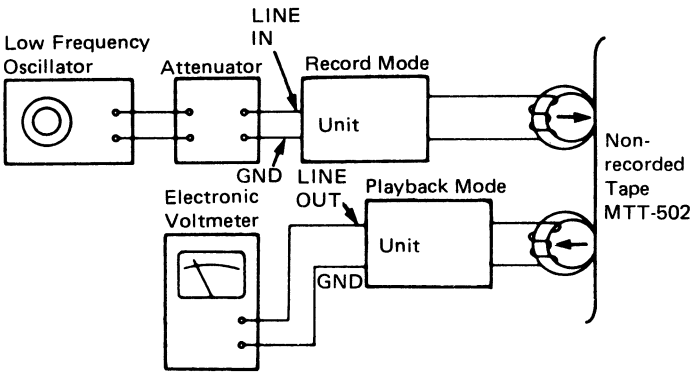


Figure 8–4 RECORD/PLAYBACK SENSITIVITY

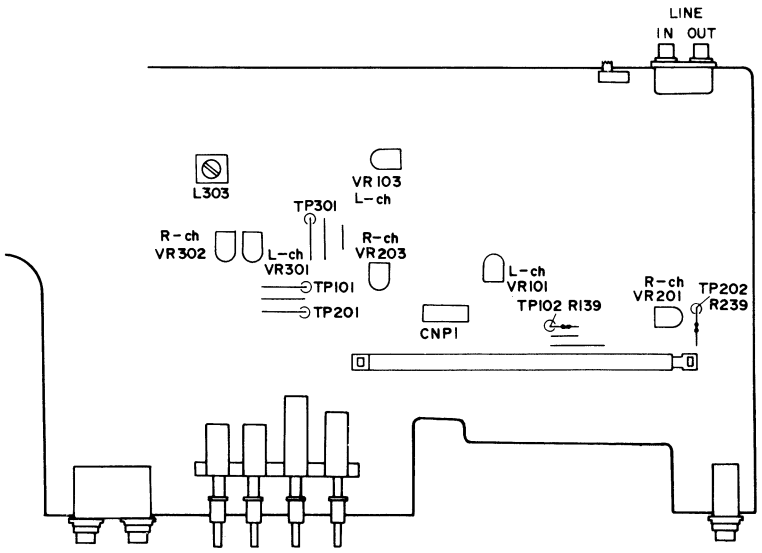


Figure 8–5 ADJUSTMENT POINTS

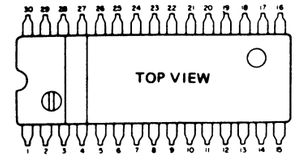
Ⓓ SCHALTUNGSEINSTELLUNG

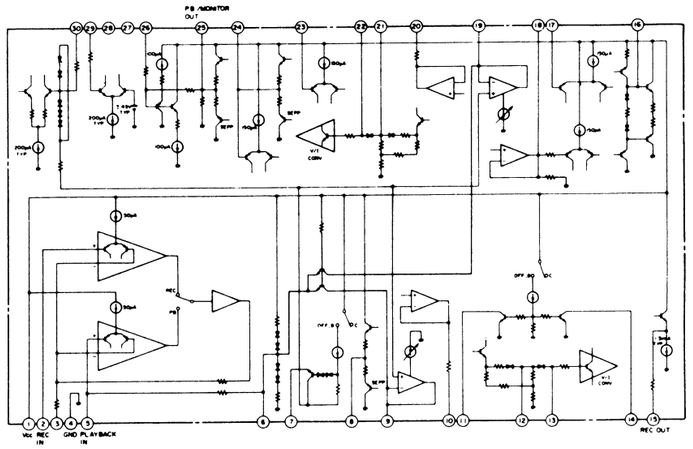
SCHALTER- UND STELLER- EINSTELLPOSITION	• Bandsortenwahlschalter: Normal • Dolby-NR-Schalter: Aus • Eingangswahlschalter: Line		
BENNENNUNG	**EINGANG**	**EINSTELL-PUNKT**	**BEMERKUNGEN (PRÜFUNG)**
VORMAGNETISIERUNGS-SCHWINGFREQUENZ	———	L303	Reineisenband: 85 ± 2 kHz
VORMAGNETISIERUNGS-SPANNUNG	———	L: VR301 R: VR302	Normalband: 15,0 V (CrO_2 - Band: 23,5 ± 2 V) (Reineisenband: 31 ± 3 V)
LÖSCH-SPANNUNG	———	———	Reineisenband: 32,0 ± 4 V
WIEDERGABA-VER-STÄRKE REMPFIND-LICHKEIT	Testband MTT-150	L: VR101 R: VR201	Normalband: 540 mV
AUFNAHME-/ WIEDERGABE-EMPFINDLICH-KEIT	Unbespieltes Band MTT-502 400 Hz, −13 dB (1 V = 0 dB)	L: VR103 R: VR203	1. Den Aufnahmepegelsteller so einstellen, daß der elektronische Spannungsmesser 350 mV anzeigt. 2. Das bespielte Normalband wiedergeben und den Trimmer so einsteelen, daß der elektronische Spannungsser 340 − 430 mV anzeigt.

Ⓕ RÉGLAGE DU CIRCUIT

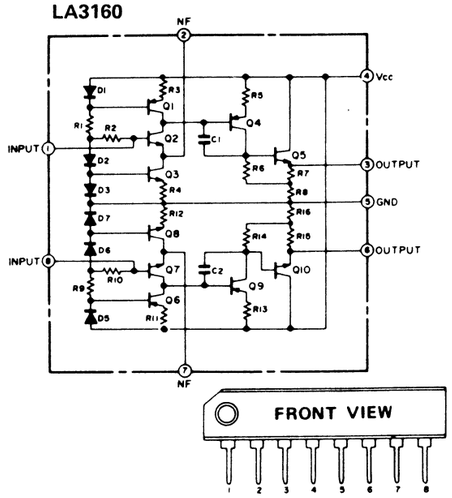
RÉGLAGE DE LA POSITION DES COMMUTATEURS ET DES BOUTONS	• Commutateur de sélection de bande: Normale • Commutateur Dolby NR: Coupé • Commutateur de sélection d'entrée: Line		
ARTICLE	**ENTRÉE**	**POINT DE RÉGLAGE**	**REMARQUES (VÉRIFICATION)**
FRÉQUENCE DE L'OSCILLATION DE POLARISATION	———	L303	Metal: 85 ± 2 kHz
TENSION DE POLARISATION	———	G: VR301 D: VR302	Normal: 15,0 V (CrO_2: 23,5 ± 2 V) (Metal : 31 ± 3 V)
TENSION D'EFFACEMENT	———	———	Metal: 32,0 ± 4 V
SENSIBILITE DE L'AMPLIFICATEUR DE LECTURE	Bande d'essai MTT-150	G: VR101 D: VR201	Normal: 540 mV
SENSIBILITÉ D'ENREGISTREMENT/LECTURE	Bande non enregistrée MTT-502 400 Hz, −13 dB (1 V = 0 dB)	G: VR103 D: VR203	1. Régler la bouton de commande de niveau du disque de telle sorte que le voltmètre électronique indique 350 mV. 2. Lire une bande normale enregistrée et régler la résistance semi-variable de telle sorte que le voltmètre électronique indique 340 à 430 mV.

HA12058NT





LA3160



BA6124

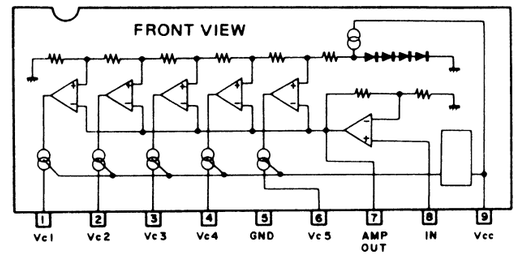


Figure 10 EQUIVALENT CIRCUIT (BLOCK DIAGRAM) OF IC

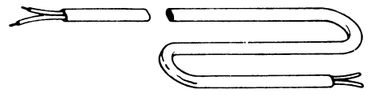
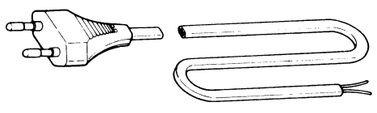
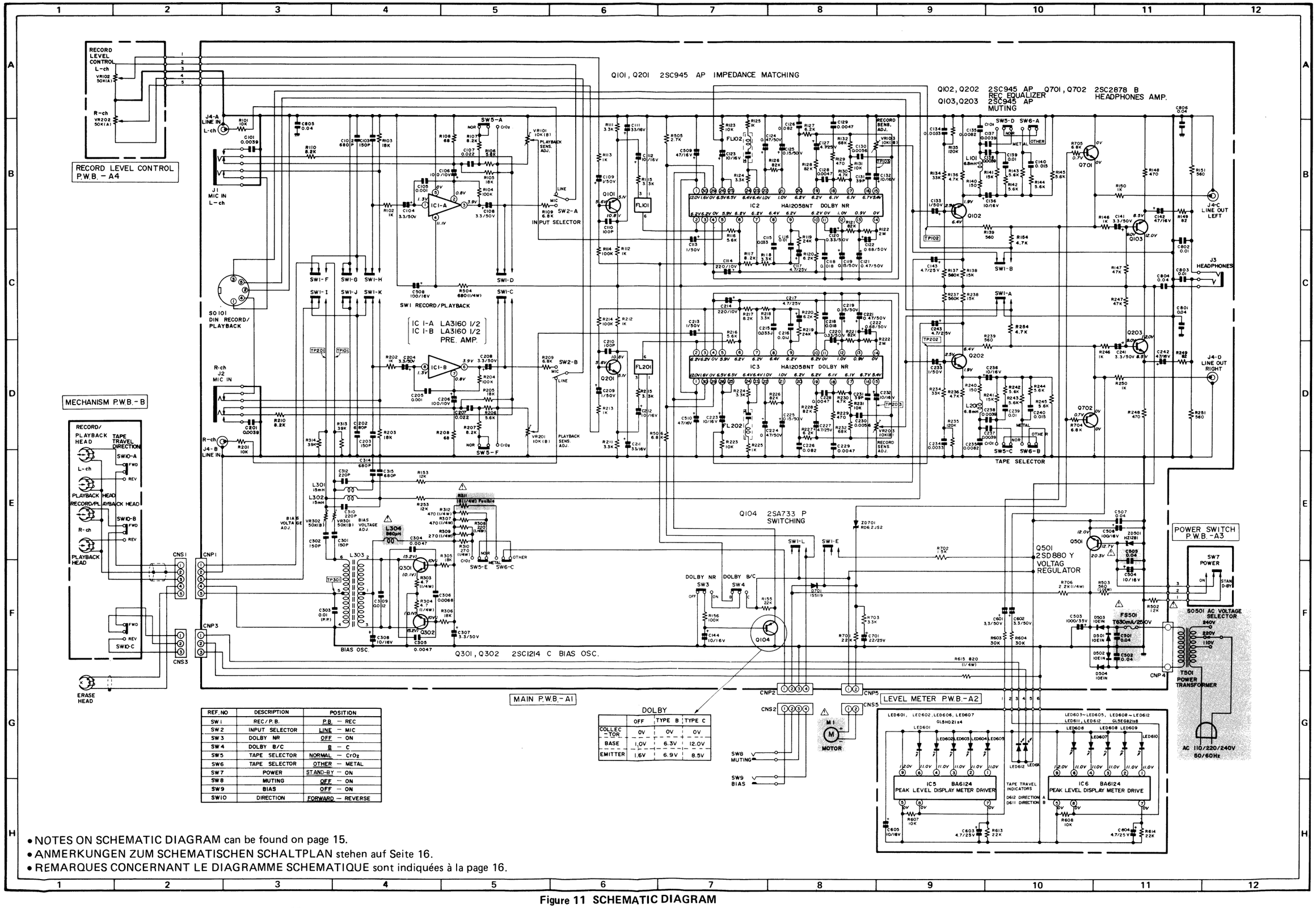
AC Power Supply Cord	Connection		Figure
	Ⓐ	Ⓑ	
QACCB0059AF09	Brown	Blue	
QACCV0001AGZZ	Brown	Blue	

Table 10 AC POWER SUPPLY CORD WIRING CONNECTIONS


RECORD LEVEL CONTROL P.W.B. - A4
MECHANISM P.W.B. - B
MAIN P.W.B. - A1
LEVEL METER P.W.B. - A2
POWER SWITCH P.W.B. - A3
Q101, Q201 2SC945 AP IMPEDANCE MATCHING
Q102, Q202 2SC945 AP REC EQUALIZER
Q103, Q203 2SC945 AP MUTING
Q701, Q702 2SC2878 B HEADPHONES AMP.
Q104 2SA733 P SWITCHING
Q301, Q302 2SC1214 C BIAS OSC.
IC 1-A LA3160 1/2 PRE. AMP.
IC 1-B LA3160 1/2 PRE. AMP.
IC2 HA12058NT DOLBY NR
IC3 HA12058NT DOLBY NR
IC5 BA6124 PEAK LEVEL DISPLAY METER DRIVER
IC6 BA6124 PEAK LEVEL DISPLAY METER DRIVE
Q501 2SD880 Y VOLTAG REGULATOR
TAPE SELECTOR
TAPE TRAVEL INDICATORS
BIAS OSC.
MOTOR
SW8 MUTING
SW9 BIAS
AC 110/220/240V 50/60Hz

REF. NO	DESCRIPTION	POSITION
SW1	REC/P.B.	P.B. — REC
SW2	INPUT SELECTOR	LINE — MIC
SW3	DOLBY NR	OFF — ON
SW4	DOLBY B/C	B — C
SW5	TAPE SELECTOR	NORMAL — CrO_2
SW6	TAPE SELECTOR	OTHER — METAL
SW7	POWER	STAND-BY — ON
SW8	MUTING	OFF — ON
SW9	BIAS	OFF — ON
SW10	DIRECTION	FORWARD — REVERSE

DOLBY

	OFF	TYPE B	TYPE C
COLLECTOR	0V	0V	0V
BASE	1.0V	6.3V	12.0V
EMITTER	1.6V	6.9V	8.5V

- NOTES ON SCHEMATIC DIAGRAM can be found on page 15.
- ANMERKUNGEN ZUM SCHEMATISCHEN SCHALTPLAN stehen auf Seite 16.
- REMARQUES CONCERNANT LE DIAGRAMME SCHEMATIQUE sont indiquées à la page 16.

Figure 11 SCHEMATIC DIAGRAM

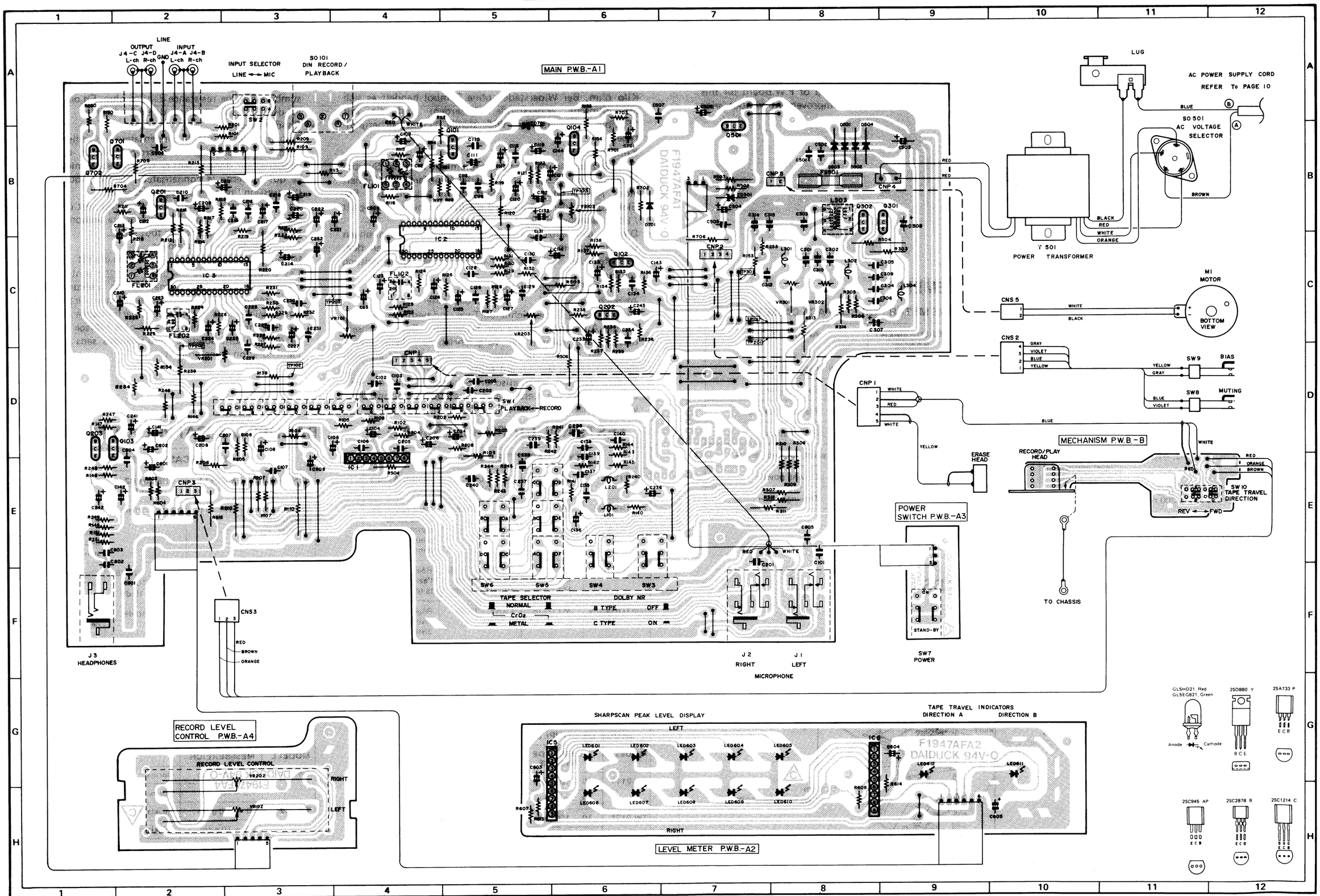


Figure 13 WIRING SIDE OF P.W.BOARD

(E) NOTES ON SCHEMATIC DIAGRAM

- Resistor:
  To differentiate the units of resistors, such symbols as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbols is ohm-type resistor. Besides, the one with "Fusible" is a fuse type.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means micro-micro-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression "capacitance/withstand voltage" is used.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
  ( ):Record mode (normal position)
  Marking, except for ( ):Stop mode
- Parts marked with "△" (▭) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.

TEST TAPES FOR MEASUREMENT

COMPACT CASSETTE TYPE

TITLE	MODEL	FREQUENCY/ LEVEL	APPLICATION
FLUTTER	MTT-111	3 kHz, –10 dB	Tape speed, Wow and flutter check
AZIMUTH	MTT-113 MTT-113C MTT-114	6.3 kHz, –10 dB 8 kHz, –10 dB 10 kHz, –10 dB	Head azimuth adjustment
DISTORTION	MTT-118	1 kHz, –10 dB	Distortion check level adjustment
DOLBY LEVEL CALIBRATION	MTT-150	Dolby B-Type Tone 200 nwb/m	Dolby NR B-type level adjustment
BLANK	MTT-502	——	Record frequency check

TORQUE METER FOR COMPACT CASSETTE

MODEL	MEASUREMENT RANGE	APPLICATION
TW-2111	10 – 100 g-cm	Normal : Playback torque
	1.5 – 10 g-cm	Normal : Back-tension
TW-2121	10 – 100 g-cm	Reverse : Playback torque
	1.5 – 10 g-cm	Reverse : Back tension
TW-2231	30 – 200 g-cm	Fast-forward, Rewind torque
TW-2412	0 – 300 g	Normal : Driving power
TW-2422	0 – 300 g	Reverse : Driving power

WIRING OF PRIMARILY SUPPLY LEADS (FOR UK)

If any one of the nylon bands shown in the Fig. 15 is removed for some reason, be sure to replace it to the original position and the same appearance as before.

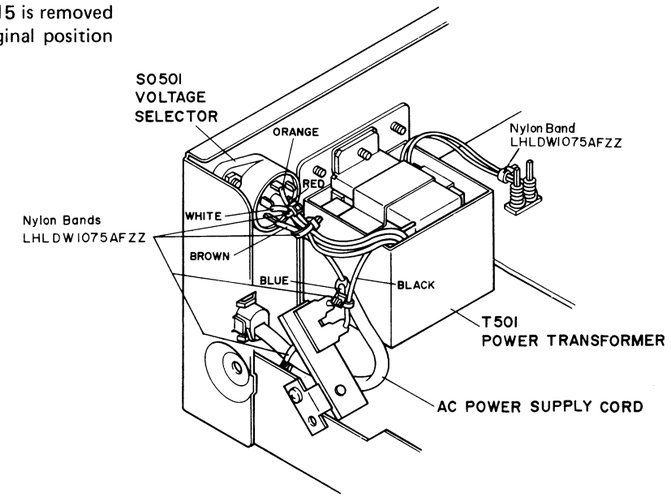


Figure 15

(D) ANMERKUNGEN ZUM SCHEMATISCHEN SCHALTPLAN

- Widerstände:
  Um die Einheiten der Widerstände unterscheiden zu können, werden Symbole wie K und M benutzt. Das Symbol K bedeutet 1 000 Ohm und das Symbol M 1 000 Kilo ohm; Bei Widerstäden ohne Symbol handelt es sich um ohmsche Widerstände. Außerdem sind die mit "Fusible" bezeichneten Widerstände Schmelzsicherungstypen.
- Kondensatoren:
  Zum Bezeichnen der Kondensatoreinheit wird das Symbol P benutzt; dieses Symbol P bedeutet Nanofard. Die Einheit eines Kondensators ohne Symbol ist Mikrofarad. Für Elektrolytkondensatoren wird die Be-zeichnung "Kapazität / Stehspannung" benutzt.
- Die in den einzelnen Teilen angegebenen Spannungen werden mit einem Digitalvielfachmeßgerät zwischen dem betreffen den Teil und dem Chassis ohne Signalzuleitung gemessen.
  ( ):Aufnahme-Betriebsart
  Anzeichnen, außer ( ):Stopp-Betriebsart
- Die mit △ (▭) bezeichneten Teile sind besonders wichtig für die Aufrechterhaltung der Sicherheit. Beim Wechseln dieser Teile sollten die vorgeschriebenen Teile immer verwendet werden, um sowohl die Sicherherheit als auch die Leistung des Gerätes aufrechtzuerhalten.
- Änderungen des schematischen Schaltplans und der Verdrahtungsseite der Leiterplatte für dieses Modell im Sinne von Verbesserungen jederzeit vorbehalten.

TESTBÄNDER FÜR MESSUNG

TYPE CASSETTE COMPACTE			
TITRE	MODÈLE	FRÉQUENCE/ NIVEAU	APPLICATION
PLEURAGE	MTT-111	3 kHz, –10 dB	Vérification de la vitesse de bande et du pleurage et scintillement
AZIMUTH	MTT-113 MTT-113C MTT-114	6,3 kHz, –10 dB 8 kHz, –10 dB 10 kHz, –10 dB	Réglage de l'azimuth de la tête
DISTORSION	MTT-118	1 kHz, –10 dB	Réglage de niveau de distorsion
CALIBRAGE DU NIVEAU DOLBY	MTT-150	Tonalité Dolby type B, 200 nwb/m	Réglage du niveau type B Dolby NR
ESPACE VIERGE	MTT-502	——	Vérification de la fréquence d'enregistrement

JAUGE DE COUPLE POUR CASSETTE COMPACTE		
MODÈLE	GAMME DE MESURE	APPLICATION
TW-2111	10 – 100 g-cm	Normal : Lecture d'enroulement
	1,5 – 10 g-cm	Normal : Tension arrière
TW-2121	10 – 100 g-cm	Retour : Lecture d'enroulement
	1,5 – 10 g-cm	Retour : Tension arrière
TW-2231	30 – 200 g-cm	Couple d'avance rapide et de rebobinage
TW-2412	0 – 300 g	Normal : Puissance d'entraînement
TW-2422	0 – 300 g	Retour : Puissance d'entraînement

(F) REMARQUES CONCERNANT LE DIAGRAMME SCHÉMATIQUE

- Résistance:
  Pour différencier les unités de résistances, on utilise des symboles tels que K et M: le symbole K signifie 1000 ohms, le symbole M 1000 Kohms, et la résistance donnée sans symbole est une résistance de type ohm. En outre, celle qui est dotées de "Fusible" est de type à fusible.
- Condensateur:
  Pour indiquer l'unité de condensateur, on utilise le symbole P; ce symbole P signifie micro-microfarad, et l'unité de condensateur donnée sans ce symbole est le microfarad. En ce qui concerne le condensateur électrolytique, on utilise l'expression "tension de régime/capacité"
- La tension indiquée dans chaque section est celle mesurée par un multimètre numérique entre la section en question et le châssis, en l'absence de tout signal.
  ( ):Mode d'enregistrement
  Marque, à l'exception de ( ):Mode d'arrêt
- Les pièces portant la marque △ (▭) sont particulièrement importantes pour le maintien de la sécurité. S'assurer de les remplacer par des pièces du numéro de pièce spécifié pour maintenir la sécurité et la performance de l'appareil.
- Le diagramme schématique et le côté câblage de la PMI de ce modèle sont sujets à modifications sans préavis pour l'amélioration de ce produit.

BANDES D'ESSAI POUR MESURAGE

KOMPAKTCASSETTENTYP			
BENENNUNG	MODELL	FREQUENZ/ PEGEL	ANWENDUNG
GLEICHLAUF-SCHWANK-UNGEN	MTT-111	3 kHz, –10 dB	Überprüfung der Bandgeschwindigkeit und Gleichlaufschwankungen
AZIMUT	MTT-113 MTT-113C MTT-114	6,3 kHz, –10 dB 8 kHz, –10 dB 10 kHz,–10 dB	Kopfazimuteinstellung
KLIRR-FAKTOR	MTT-118	1 kHz, –10 dB	Verzerrungspegeleinstellung
DOLBY-PEGEL-EICHUNG	MTT-150	Ton von Dolby B-Typ 200 nwb/m	Dolby-NR B-Typ-Pegeleinstellung
LEER-CASSETTE	MTT-502	——	Überprüfung der Aufnahmefrequenz

DREHMOMENTMESSER FÜR KOMPAKTCASSETTE		
MODELL	MESSBEREICH	ANWENDUNG
TW-2111	10 – 100 g-cm	Normal : Wiedergabedrehmoment
	1,5 – 10 g-cm	Normal : Rückzug
TW-2121	10 – 100 g-cm	Rücklauf : Wiedergabedrehmoment
	1,5 – 10 g-cm	Rücklauf : Rückzug
TW-2231	30 – 200 g-cm	Schnellvorlauf-, Rückspuldrehmoment
TW-2412	0 – 300 g	Normal : Antriebskraft
TW-2422	0 – 300 g	Rücklauf : Antriebskraft

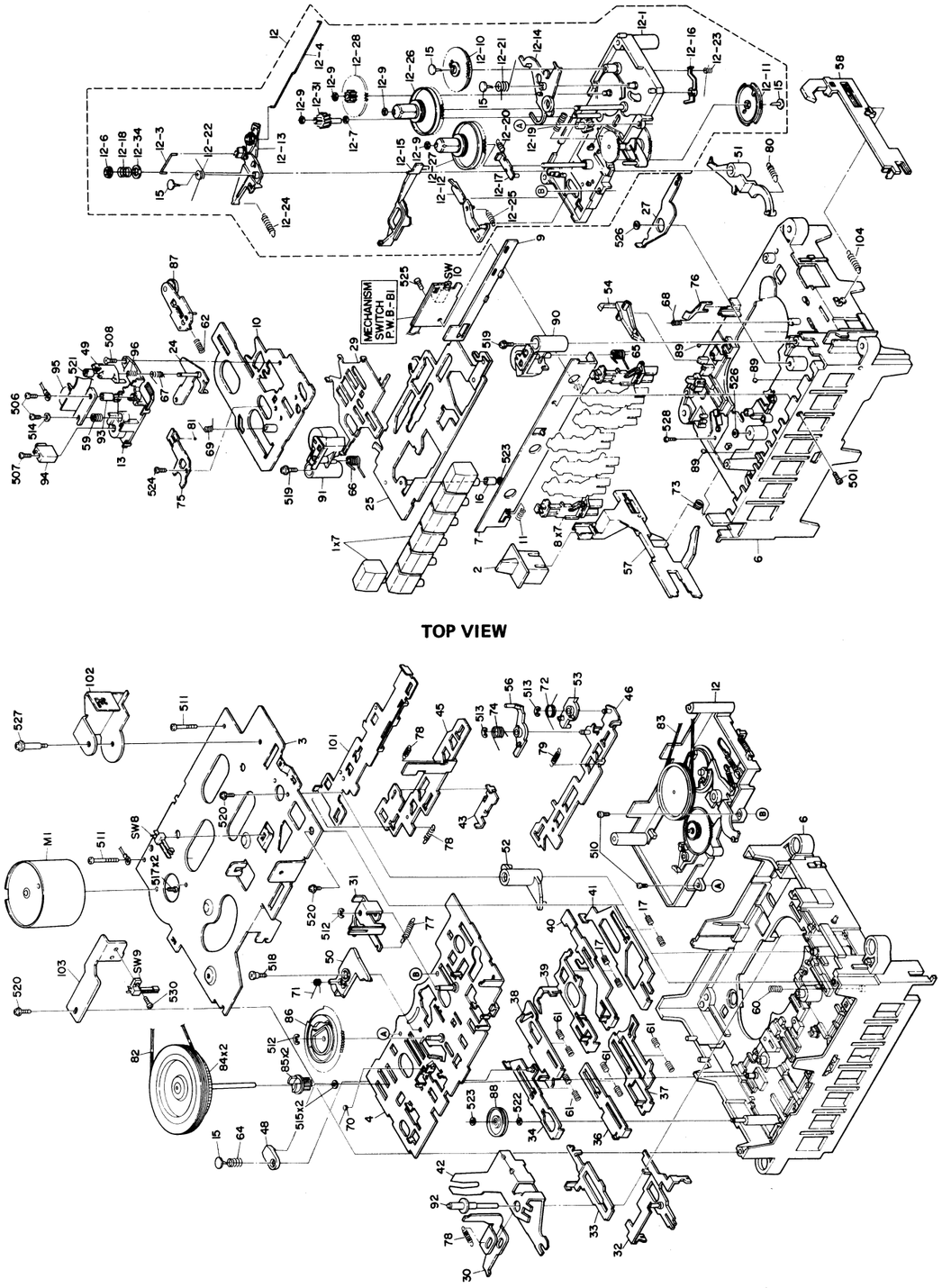


Figure 17 EXPLODED VIEW (MECHANISM)

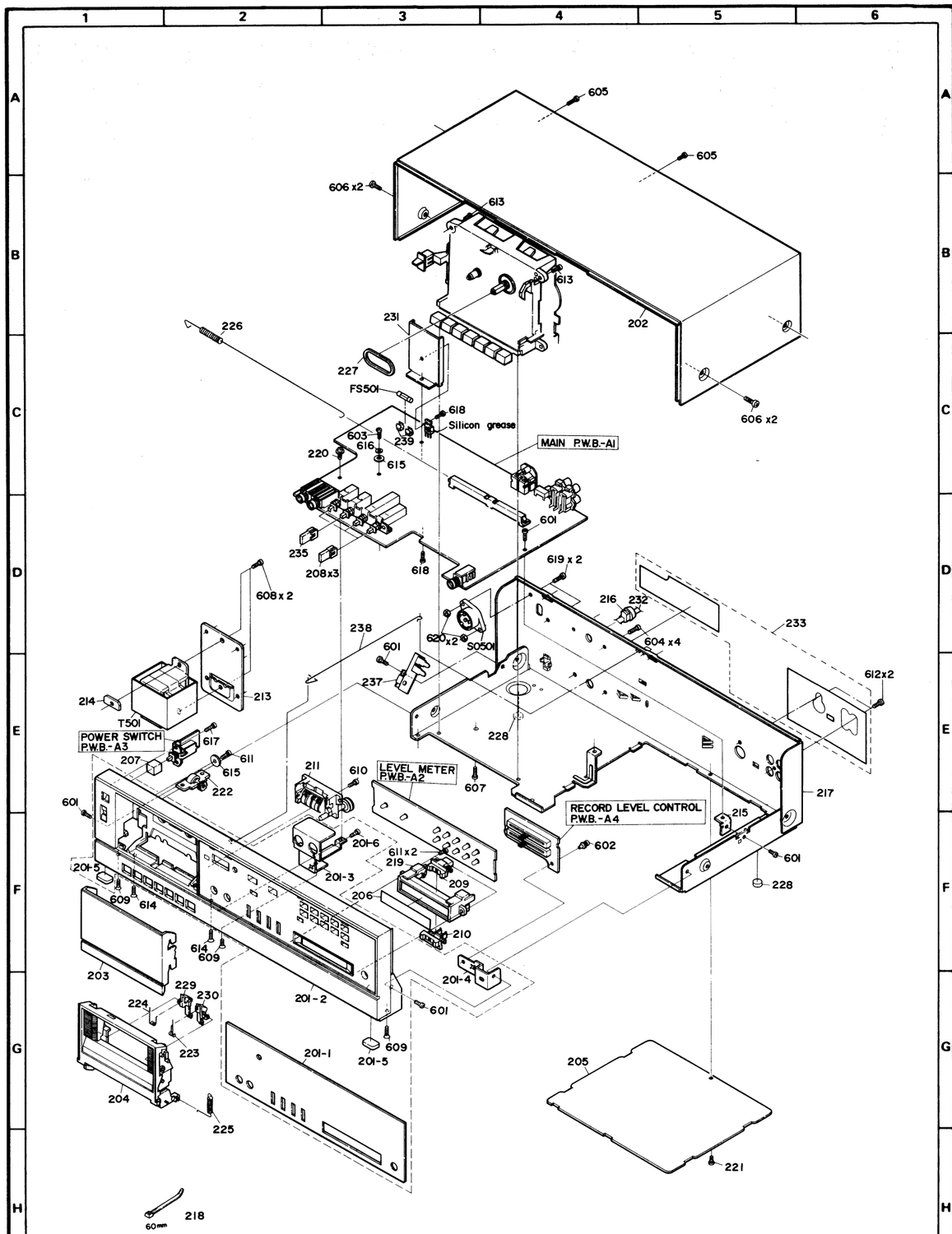


Figure 18 EXPLODED VIEW (CABINET)

(E) REPLACEMENT PARTS LIST

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION

NOTE:
Parts marked with "△" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

(D) ERSATZTEILLISTE

"BESTELLEN VON ERSATZTEILEN"

Um Ihren Auftrag schnell und richtig ausfuhren zu können, bitten wir um die folgenden Angaben.

1. MODELLNUMMER
2. REF. NR.
3. TEIL NR.
4. BESCHREIBUNG

ANMERKUNGEN:
Die mit △ bezeichneten Teile sind besonders wichtig für die Aufrechterhaltung der Sicherheit. Beim Wechseln dieser Teile sollten die vorgeschriebenen Teile immer verwendet werden, um sowohl die Sicherheit als auch die Leistung des Gerätes aufrechtzuerhalten.

(F) LISTE DES PIÈCES DE RECHANGE

"COMMENT COMMANDER DES PIÈCES DE RECHANGE"

Pour voir votre commande exécutée de manière rapide et correcte, veuillez fournir les renseignements suivants.

1. NUMÉRO DU MODÈLE
2. N° DE RÉFÉRENCE
3. N° DE LA PIÈCE
4. DESCRIPTION

NOTE:
Les pièces portant la marque △ sont particulièrement importantes pour le maintien de la securité. S'assurer de les remplacer par des pièces du numéro de pièce spécifié pour maintenir la sécurité et la performance de l'appareil.

REF.NO.	PART NO.	DESCRIPTION	CODE
INTEGRATED CIRCUITS			
IC1	VHiLA3160//-1	Dual Pre-Amp, LA3160	AG
IC2	VHiHA12058NT1	Dolby NR Circuit, HA12058NT	AU
IC3	VHiHA12058NT1	Dolby NR Circuit, HA12058NT	AU
IC5	VHiBA6124//-1	Level Meter Driver, BA6124	AG
IC6	VHiBA6124//-1	Level Meter Driver, BA6124	AG
TRANSISTORS			
Q101	VS2SC945AP/-1	Silicon, NPN, 2SC945 AP	AB
Q102	VS2SC945AP/-1	Silicon, NPN, 2SC945 AP	AB
Q103	VS2SC945AP/-1	Silicon, NPN, 2SC945 AP	AB
Q104	VS2SA733-P/-1	Silicon, PNP, 2SA733 P	AC
Q201	VS2SC945AP/-1	Silicon, NPN, 2SC945 AP	AB
Q202	VS2SC945AP/-1	Silicon, NPN, 2SC945 AP	AB
Q203	VS2SC945AP/-1	Silicon, NPN, 2SC945 AP	AB
Q301	VS2SC1214-C-1	Silicon, NPN, 2SC1214 C	AC
Q302	VS2SC1214-C-1	Silicon, NPN, 2SC1214 C	AC
Q501	VS2SD880-Y/-1	Silicon, NPN, 2SD880 Y	AF
Q701	VS2SC2878B/-1	Silicon, NPN, 2SC2878 B	AC
Q702	VS2SC2878B/-1	Silicon, NPN, 2SC2878 B	AC
DIODES			
D501	VHD10E1N///-1	Silicon, 10E1N	AB
D502	VHD10E1N///-1	Silicon, 10E1N	AB
D503	VHD10E1N///-1	Silicon, 10E1N	AB
D504	VHD10E1N///-1	Silicon, 10E1N	AB
LED601	VHPGL5HD21/-1	LED, Red, GL5HD21	AC
LED602	VHPGL5HD21/-1	LED, Red, GL5HD21	AC
LED603	VHPGL5EG821-1	LED, Green, GL5EG821	AC
LED604	VHPGL5EG821-1	LED, Green, GL5EG821	AC
LED605	VHPGL5EG821-1	LED, Green, GL5EG821	AC
LED606	VHPGL5HD21/-1	LED, Red, GL5HD21	AC
LED607	VHPGL5HD21/-1	LED, Red, GL5HD21	AC
LED608	VHPGL5EG821-1	LED, Green, GL5EG821	AC
LED609	VHPGL5EG821-1	LED, Green, GL5EG821	AC
LED610	VHPGL5EG821-1	LED, Green, GL5EG821	AC
LED611	VHPGL5EG821-1	LED, Green, GL5EG821	AC
LED612	VHPGL5EG821-1	LED, Green, GL5EG821	AC
D701	VHD1SS119//-1	Silicon, 1SS119	AA
ZD501	VHEHZ12B1//-1	Zener, 12.7V, HZ12B1	AB
ZD701	VHERD6R2JS2-1	Zener, 6.2V, RD6.2JS2	AB

REF.NO.	PART NO.	DESCRIPTION	CODE
COILS			
L101	RCiLZ0145AFZZ	6.8 mH, Record Equalizer	AD
L201	RCiLZ0145AFZZ	6.8 mH, Record Equalizer	AD
L301	RCiLZ0144AFZZ	15 mH, Bias Trap	AD
L302	RCiLZ0144AFZZ	15 mH, Bias Trap	AD
L303	RCiLB0744AFZZ	Bias Oscillator	AF
△L304	RCiLZ0146AFZZ	560 μH, Choke	AD
TRANSFORMER			
△T501	RTRNP1105AFZZ	Power	AW
FILTERS			
FL101	RCiLL0092AFZZ	Multiplex	AH
FL102	RCiLL0095AFZZ	Spectral Skewing	AF
FL201	RCiLL0092AFZZ	Multiplex	AH
FL202	RCiLL0095AFZZ	Spectral Skewing	AF
CONTROLS			
VR101	RVR-M0391AFZZ	10 kohm (B)	AB
VR102,202	RVR-P0114AFZZ	50 kohms (A)	AL
VR103	RVR-M0391AFZZ	10 kohm (B)	AB
VR201	RVR-M0391AFZZ	10 kohm (B)	AB
VR203	RVR-M0391AFZZ	10 kohm (B)	AB
VR301	RVR-M0394AFZZ	50 kohms (B)	AB
VR302	RVR-M0394AFZZ	50 kohms (B)	AB
ELECTROLYTIC CAPACITORS			
(All electrolytic capacitors are ±20% type.)			
C104	VCEALA1HW335M	3.3 μF, 50V	AB
C106	RC-EZA107AF1A	100 μF, 10V	AB
C108	RC-EZA335AF1H	3.3 μF, 50V	AB
C109	RC-EZA105AF1H	1 μF, 50V	AB
C111	RC-EZA336AF1C	33 μF, 16V	AB
C112	RC-EZA106AF1C	10 μF, 16V	AB
C113	RC-EZA105AF1H	1 μF, 50V	AB
C114	RC-EZA227AF1A	220 μF, 10V	AB
C117	VCEALA1EW475M	4.7 μF, 25V	AB
C119	RC-EZA154AF1H	0.15 μF, 50V	AB
C120	RC-EZA334AF1H	0.33 μF, 50V	AB
C121	RC-EZA474AF1H	0.47 μF, 50V	AB
C122	RC-EZA684AF1H	0.68 μF, 50V	AB
C123	RC-EZA106AF1C	10 μF, 16V	AB
C124	RC-EZA474AF1H	0.47 μF, 50V	AB
C125	RC-EZA154AF1H	0.15 μF, 50V	AB
C127	VCEALA1EW475M	4.7 μF, 25V	AB
C132	RC-EZA106AF1C	10 μF, 16V	AB
C133	RC-EZA105AF1H	1 μF, 50V	AB
C136	RC-EZA106AF1C	10 μF, 16V	AB
C141	RC-EZA335AF1H	3.3 μF, 50V	AB
C142	RC-EZA476AF1C	47 μF, 16V	AB
C143	RC-EZA475AF1E	4.7 μF, 25V	AB
C144	RC-EZA106AF1C	10 μF, 16V	AB
C204	VCEALA1HW335M	3.3 μF, 50V	AB
C206	RC-EZA107AF1A	100 μF, 10V	AB
C208	RC-EZA335AF1H	3.3 μF, 50V	AB
C209	RC-EZA105AF1H	1 μF, 50V	AB
C211	RC-EZA336AF1C	33 μF, 16V	AB
C212	RC-EZA106AF1C	10 μF, 16V	AB
C213	RC-EZA105AF1H	1 μF, 50V	AB
C214	RC-EZA227AF1A	220 μF, 10V	AB
C217	VCEALA1EW475M	4.7 μF, 25V	AB
C219	RC-EZA154AF1H	0.15 μF, 50V	AB
C220	RC-EZA334AF1H	0.33 μF, 50V	AB
C221	RC-EZA474AF1H	0.47 μF, 50V	AB
C222	RC-EZA684AF1H	0.68 μF, 50V	AB
C223	RC-EZA106AF1C	10 μF, 16V	AB
C224	RC-EZA474AF1H	0.47 μF, 50V	AB
C225	RC-EZA154AF1H	0.15 μF, 50V	AB
C227	VCEALA1EW475M	4.7 μF, 25V	AB
C232	RC-EZA106AF1C	10 μF, 16V	AB
C233	RC-EZA105AF1H	1 μF, 50V	AB
C236	RC-EZA106AF1C	10 μF, 16V	AB
C241	RC-EZA335AF1H	3.3 μF, 50V	AB
C242	RC-EZA476AF1C	47 μF, 16V	AB
C243	RC-EZA475AF1E	4.7 μF, 25V	AB
C307	RC-EZA335AF1H	3.3 μF, 50V	AB
C308	RC-EZA106AF1C	10 μF, 16V	AB
C503	RC-EZW108AF1V	1000 μF, 35V	AF
C504	RC-EZA106AF1C	10 μF, 16V	AB
C506	RC-EZA107AF1C	100 μF, 16V	AB
C508	RC-EZA107AF1C	100 μF, 16V	AB
C509	RC-EZA476AF1C	47 μF, 16V	AB
C510	RC-EZA476AF1C	47 μF, 16V	AB
C601	RC-EZA335AF1H	3.3 μF, 50V	AB
C602	RC-EZA335AF1H	3.3 μF, 50V	AB
C603	RC-EZA475AF1E	4.7 μF, 25V	AB
C604	RC-EZA475AF1E	4.7 μF, 25V	AB
C605	RC-EZA106AF1C	10 μF, 16V	AB
C701	RC-EZA226AF1E	22 μF, 25V	AB

CAPACITORS

There are two types of capacitors available and they can be identified from each other by reading their Part Numbers.

- Ceramic type capacitor:
  A symbol 'C' or 'K' is given at the 3rd digit of its Part Number like 'VCC (or K) ●●●●●●●J.'
- Semiconductor type capacitor:
  A symbol 'T' is given at the 3rd digit of its Part Number like "VCT●●●●●●● J.'

The capacitance error of each capacitor is indicated by the symbol given at the 13th digit of the Part Number as follows: 'J' (±5%), 'K' (±10%), 'M' (±20%), 'N' (±30%), 'C' (±0.25 pF), 'D' (±0.5 pF), 'Z' (+80−20%).

REF.NO.	PART NO.	DESCRIPTION	CODE
C101	VCTYPA1EX392J	0.0039 μF, 25V	AA
C102	VCCSPA1HL681J	680 pF, 50V	AA
C103	VCCSPA1HL151J	150 pF, 50V	AA
C105	VCTYPA1EX102J	0.001 μF, 25V	AA
C107	VCTYPA1EX223J	0.022 μF, 25V	AA
C110	VCCSPA1HL101J	100 pF, 50V	AA
C115	VCTYPA1EX333J	0.033 μF, 25V	AB
C116	VCTYPA1EX103J	0.01 μF, 25V	AA
C118	VCTYPA1EX183J	0.018 μF, 25V	AA
C126	VCTYPA1EX823J	0.082 μF, 25V	AB
C128	VCTYPA1EX472J	0.0047 μF, 25V	AA
C129	VCTYPA1EX472J	0.0047 μF, 25V	AA
C130	VCTYPA1EX562J	0.0056 μF, 25V	AA
C131	VCCSPA1HL390J	39 pF, 50V	AA
C134	VCTYPA1EX332J	0.0033 μF, 25V	AA
C135	VCTYPA1EX822J	0.0082 μF, 25V	AA
C137	VCTYPA1EX392J	0.0039 μF, 50V	AA
C138	VCTYPA1EX392J	0.0039 μF, 50V	AA
C139	VCTYPA1EX103J	0.01 μF, 25V	AA
C140	VCTYPA1EX153J	0.015 μF, 25V	AA
C201	VCTYPA1EX392J	0.0039 μF, 25V	AA
C202	VCCSPA1HL681J	680 pF, 50V	AA
C203	VCCSPA1HL151J	150 pF, 50V	AA
C205	VCTYPA1EX102J	0.001 μF, 25V	AA
C207	VCTYPA1EX223J	0.022 μF, 25V	AA
C210	VCCSPA1HL101J	100 pF, 50V	AA
C215	VCTYPA1EX333J	0.033 μF, 25V	AB
C216	VCTYPA1EX103J	0.01 μF, 25V	AA
C218	VCTYPA1EX183J	0.018 μF, 25V	AA
C226	VCTYPA1EX823J	0.082 μF, 25V	AB
C228	VCTYPA1EX472J	0.0047 μF, 25V	AA
C229	VCTYPA1EX472J	0.0047 μF, 25V	AA
C230	VCTYPA1EX562J	0.0056 μF, 25V	AA
C231	VCCSPA1HL390J	39 pF, 50V	AA
C234	VCTYPA1EX332J	0.0033 μF, 25V	AA
C235	VCTYPA1EX822J	0.0082 μF, 25V	AA
C237	VCTYPA1EX392J	0.0039 μF, 50V	AA
C238	VCTYPA1EX392J	0.0039 μF, 50V	AA
C239	VCTYPA1EX103J	0.01 μF, 25V	AA
C240	VCTYPA1EX153J	0.015 μF, 25V	AA
C301	VCCSPA1HL151J	150 pF, 50V	AA
C302	VCCSPA1HL151J	150 pF, 50V	AA
C303	VCQPKV2AA103J	0.01 μF, 100V, Polypropylene	AB
C304	VCTYPA1EX472J	0.0047 μF, 25V	AA
C305	VCTYPA1EX472J	0.0047 μF, 25V	AA
C306	VCTYPA1EX682J	0.0068 μF, 25V	AA
C309	VCTYPA1EX123J	0.012 μF, 25V	AA
C310	VCCSPA1HL221J	220 pF, 50V	AA
C312	VCCSPA1HL221J	220 pF, 50V	AA
C314	VCCSPA1HL681J	680 pF, 50V	AA
C315	VCCSPA1HL681J	680 pF, 50V	AA
△C501	VCKZPA1HF403Z	0.04 μF, 50V	AA
△C502	VCKZPA1HF403Z	0.04 μF, 50V	AA
△C505	VCKZPA1HF403Z	0.04 μF, 50V	AA
C507	VCKZPA1HF403Z	0.04 μF, 50V	AA
C801	VCKZPA1HF403Z	0.04 μF, 50V	AA
C802	VCKZPA1HF103Z	0.01 μF, 50V	AA
C803	VCKZPA1HF103Z	0.01 μF, 50V	AA
C804	VCKZPA1HF403Z	0.04 μF, 50V	AA
C805	VCKZPA1HF403Z	0.04 μF, 50V	AA
C806	VCKZPA1HF403Z	0.04 μF, 50V	AA

RESISTORS

(Unless otherwise specified, resistors are ±5%, carbon type.)

REF.NO.	PART NO.	DESCRIPTION	CODE
R101	VRD-ST2CD103J	10 kohm, 1/6W	AA
R102	VRD-ST2CD102J	1 kohm, 1/6W	AA
R103	VRD-ST2CD183J	18 kohms, 1/6W	AA
R104	VRD-ST2CD104J	100 kohm, 1/6W	AA
R105	VRD-ST2CD183J	18 kohms, 1/6W	AA
R106	VRD-ST2CD562J	5.6 kohms, 1/6W	AA
R107	VRD-ST2CD822J	8.2 kohms, 1/6W	AA
R108	VRD-ST2CD680J	68 ohms, 1/6W	AA
R109	VRD-ST2CD682J	6.8 kohms, 1/6W	AA
R110	VRD-ST2CD822J	8.2 kohms, 1/6W	AA
R111	VRD-ST2CD332J	3.3 kohms, 1/6W	AA

REF.NO.	PART NO.	DESCRIPTION	CODE
R112	VRD-ST2CD102J	1 kohm, 1/6W	AA
R113	VRD-ST2CD102J	1 kohm, 1/6W	AA
R114	VRD-ST2CD104J	100 kohm, 1/6W	AA
R115	VRD-ST2CD332J	3.3 kohms, 1/6W	AA
R116	VRD-ST2CD562J	5.6 kohms, 1/6W	AA
R117	VRD-ST2CD822J	8.2 kohms, 1/6W	AA
R118	VRD-ST2CD332J	3.3 kohms, 1/6W	AA
R119	VRD-ST2CD243J	24 kohms, 1/6W	AA
R120	VRD-ST2CD622J	6.2 kohms, 1/6W	AA
R121	VRD-ST2CD823J	82 kohms, 1/6W	AA
R122	VRD-ST2CD205J	2 Mohms, 1/6W	AA
R123	VRD-ST2CD103J	10 kohm, 1/6W	AA
R124	VRD-ST2CD332J	3.3 kohms, 1/6W	AA
R125	VRD-ST2CD102J	1 kohm, 1/6W	AA
R126	VRD-ST2CD823J	82 kohms, 1/6W	AA
R127	VRD-ST2CD622J	6.2 kohms, 1/6W	AA
R128	VRD-ST2CD823J	82 kohms, 1/6W	AA
R129	VRD-ST2CD471J	470 ohms, 1/6W	AA
R130	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R131	VRD-ST2CD103J	10 kohm, 1/6W	AA
R132	VRD-ST2CD683J	68 kohms, 1/6W	AA
R134	VRD-ST2CD333J	33 kohms, 1/6W	AA
R135	VRD-ST2CD124J	120 kohms, 1/6W	AA
R136	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R137	VRD-ST2CD564J	560 kohms, 1/6W	AA
R138	VRD-ST2CD153J	15 kohms, 1/6W	AA
R139	VRD-ST2CD561J	560 ohms, 1/6W	AA
R140	VRD-ST2CD151J	150 ohms, 1/6W	AA
R141	VRD-ST2CD153J	15 kohms, 1/6W	AA
R142	VRD-ST2CD562J	5.6 kohms, 1/6W	AA
R143	VRD-ST2CD562J	5.6 kohms, 1/6W	AA
R144	VRD-ST2CD562J	5.6 kohms, 1/6W	AA
R145	VRD-ST2CD562J	5.6 kohms, 1/6W	AA
R146	VRD-ST2CD102J	1 kohm, 1/6W	AA
R147	VRD-ST2CD473J	47 kohms, 1/6W	AA
R148	VRD-ST2CD471J	470 ohms, 1/6W	AA
R149	VRD-ST2CD820J	82 ohms, 1/6W	AA
R150	VRD-ST2CD102J	1 kohm, 1/6W	AA
R151	VRD-ST2CD561J	560 ohms, 1/6W	AA
R153	VRD-ST2CD123J	12 kohms, 1/6W	AA
R154	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R155	VRD-ST2CD223J	22 kohms, 1/6W	AA
R156	VRD-ST2CD104J	100 kohm, 1/6W	AA
R201	VRD-ST2CD103J	10 kohm, 1/6W	AA
R202	VRD-ST2CD102J	1 kohm, 1/6W	AA
R203	VRD-ST2CD183J	18 kohms, 1/6W	AA
R204	VRD-ST2CD104J	100 kohm, 1/6W	AA
R205	VRD-ST2CD183J	18 kohms, 1/6W	AA
R206	VRD-ST2CD562J	5.6 kohms, 1/6W	AA
R207	VRD-ST2CD822J	8.2 kohms, 1/6W	AA
R208	VRD-ST2CD680J	68 ohms, 1/6W	AA
R209	VRD-ST2CD682J	6.8 kohms, 1/6W	AA
R210	VRD-ST2CD822J	8.2 kohms, 1/6W	AA
R211	VRD-ST2CD332J	3.3 kohms, 1/6W	AA
R212	VRD-ST2CD102J	1 kohm, 1/6W	AA
R213	VRD-ST2CD102J	1 kohm, 1/6W	AA
R214	VRD-ST2CD104J	100 kohm, 1/6W	AA
R215	VRD-ST2CD332J	3.3 kohms, 1/6W	AA
R216	VRD-ST2CD562J	5.6 kohms, 1/6W	AA
R217	VRD-ST2CD822J	8.2 kohms, 1/6W	AA
R218	VRD-ST2CD332J	3.3 kohms, 1/6W	AA
R219	VRD-ST2CD243J	24 kohms, 1/6W	AA
R220	VRD-ST2CD622J	6.2 kohms, 1/6W	AA
R221	VRD-ST2CD823J	82 kohms, 1/6W	AA
R222	VRD-ST2CD205J	2M ohms, 1/6W	AA
R223	VRD-ST2CD103J	10 kohm, 1/6W	AA
R224	VRD-ST2CD332J	3.3 kohms, 1/6W	AA
R225	VRD-ST2CD102J	1 kohm, 1/6W	AA
R226	VRD-ST2CD823J	82 kohms, 1/6W	AA
R227	VRD-ST2CD622J	6.2 kohms, 1/6W	AA
R228	VRD-ST2CD823J	82 kohms, 1/6W	AA
R229	VRD-ST2CD471J	470 ohms, 1/6W	AA
R230	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R231	VRD-ST2CD103J	10 kohm, 1/6W	AA
R232	VRD-ST2CD683J	68 kohms, 1/6W	AA
R234	VRD-ST2CD333J	33 kohms, 1/6W	AA
R235	VRD-ST2CD124J	120 kohms, 1/6W	AA
R236	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R237	VRD-ST2CD564J	560 kohms, 1/6W	AA
R238	VRD-ST2CD153J	15 kohms, 1/6W	AA
R239	VRD-ST2CD561J	560 ohms, 1/6W	AA
R240	VRD-ST2CD151J	150 ohms, 1/6W	AA
R241	VRD-ST2CD153J	15 kohms, 1/6W	AA
R242	VRD-ST2CD562J	5.6 kohms, 1/6W	AA
R243	VRD-ST2CD562J	5.6 kohms, 1/6W	AA
R244	VRD-ST2CD562J	5.6 kohms, 1/6W	AA
R245	VRD-ST2CD562J	5.6 kohms, 1/6W	AA
R246	VRD-ST2CD102J	1 kohm, 1/6W	AA
R247	VRD-ST2CD473J	47 kohms, 1/6W	AA
R248	VRD-ST2CD471J	470 ohms, 1/6W	AA
R249	VRD-ST2CD820J	82 ohms, 1/6W	AA
R250	VRD-ST2CD102J	1 kohm, 1/6W	AA
R251	VRD-ST2CD561J	560 ohms, 1/6W	AA
R253	VRD-ST2CD123J	12 kohms, 1/6W	AA
R254	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R303	VRD-ST2EE4R7J	4.7 ohms,1/4W	AA
R304	VRD-ST2EE4R7J	4.7 ohms,1/4W	AA
R305	VRD-ST2CD183J	18 kohms, 1/6W	AA
R306	VRD-ST2CD183J	18 kohms, 1/6W	AA
R307	VRD-ST2EE471J	470 ohms, 1/4W	AA
R308	VRD-ST2EE221J	220 ohms, 1/4W	AA
R309	VRD-ST2EE271J	270 ohms, 1/4W	AA
R310	VRD-ST2EE271J	270 ohms, 1/4W	AA
⚠R311	VRG-ST2EF180J	18 ohms, 1/4W, Fusible	AB
R312	VRD-ST2EE471J	470 ohms, 1/4W	AA
R313	VRD-ST2CD393J	39 kohms, 1/6W	AA
R314	VRD-ST2CD393J	39 kohms, 1/6W	AA
R502	VRD-ST2CD122J	1.2 kohms, 1/6W	AA
R503	VRD-ST2EE561J	560 ohms, 1/4W	AA
R504	VRD-ST2EE681J	680 ohms, 1/4W	AA
R505	VRD-ST2CD272J	2.7 kohms, 1/6W	AA
R506	VRD-ST2CD682J	6.8 kohms, 1/6W	AA
R603	VRD-ST2CD303J	30 kohms, 1/6W	AA
R604	VRD-ST2CD303J	30 kohms, 1/6W	AA
R607	VRD-ST2CD103J	10 kohm, 1/6W	AA
R608	VRD-ST2CD103J	10 kohm, 1/6W	AA
R613	VRD-ST2CD223J	22 kohms, 1/6W	AA
R614	VRD-ST2CD223J	22 kohms, 1/6W	AA
R615	VRD-ST2EE821J	820 ohms, 1/4W	AA
R701	VRD-ST2CD223J	22 kohms, 1/6W	AA
R702	VRD-ST2CD152J	1.5 kohms, 1/6W	AA
R703	VRD-ST2CD332J	3.3 kohms, 1/6W	AA
R704	VRD-ST2CD682J	6.8 kohms, 1/6W	AA
R705	VRD-ST2CD682J	6.8 kohms, 1/6W	AA
R706	VRD-ST2EE222J	2.2 kohms, 1/4W	AA

CIRCUIT PARTS

	QCNW-3158AFFJ	Lead with Lug, Mechanism	AC
CNS1	QCNW-2948AFZZ	Connector Assembly, 5Pin	AG
CNS2	QCNW-2950AFZZ	Connector Assembly, 4Pin	AD
CNS3	QCNW-2949AFZZ	Connector Assembly, 3Pin	AD
CNS5	QCNW-2961AFZZ	Connector Assembly, 2Pin	AC
CNP1	QCNCM663EAFZZ	Plug, 5Pin	AC
CNP2	QCNCM663DAFZZ	Plug, 4Pin	AB
CNP3	QCNCM663CAFZZ	Plug, 3Pin	AC
CNP4	QCNCM552BAFZZ	Plug, 2Pin	AA
CNP5	QCNCM512BAFZZ	Plug, 2Pin	AB
⚠FS501	QFS-C631EAFNi	Fuse, T630 mA × 250V, Europe	AD
⚠FS501	QFS-C631GAFNi	Fuse, T630 mA × 250V, England	AF
J1	QJAKF0065AFZZ	Jack, Microphones	AH
J2	————	Part of REF. No. J1	—
J3	QJAKJ0146AFZZ	Jack, Headphones	AD
J4(A~D)	QSōCJ0498AFZZ	Jack, Line Input/Output	AE
⚠M1	RMōTV0183AF01	Motor Assembly	AU
SO101	QSōCD4507AFZZ	Socket, DIN Record/Playback	AE
⚠SO501	QSōCE0606AFZZ	AC Voltage Selector	AF
SW1	QSW-S0463AFZZ	Switch, Slide Type	AK
SW2	QSW-S0427AFZZ	Switch, Slide Type	AD
SW3,4,5,6	QSW-P0582AFZZ	Switch, 4-Segment, Push Type	AS
SW7	QSW-P0365AFZZ	Switch, Push Type	AF
SW8	QSW-F0205AFZZ	Switch, Leaf Type	AC
SW9	QSW-F0210AFZZ	Switch, Leaf Type	AE
SW10	QSW-S0420AFZZ	Switch, Slide Type	AE

MECHANICAL PARTS

1	JKNBR0247AFSA	Button, Mechanism Operation	AC
2	JKNBR0246AFSB	Knob, Reverse Mode Selector	AB
3	LANGF0919AFZZ	Bracket, Motor	BB
4	LANGG0125AFZZ	Chassis, Back	AF
6	————	Main Chassis	—
7	LANGF0903AFZZ	Bracket, Operation Button Pressure	AC
8	MLEVP0559AFZZ	Lever, Operation Button	AA
9	MLEVP0560AFZZ	Lever, Prevention	AB
10	LCHSS0209AFZZ	Sub-Chassis	AE
11	MSPRC0516AFFJ	Spring, Prevention	AA
12	LCHSZ0174AF00	Take-Up/Supply Turntable Block Assembly	AT
12-1	————	Chassis, Take-Up/Supply Turntable	—
12-3	LPiNZ0062AFFJ	Pin, Latch Plate	AB
12-4	LPiNZ0067AFFJ	Rod, Lock Connecting	AD
12-6	LRTNP0059AF00	Retaining Ring	AA
12-7	LX-WZ5018AGZZ	Washer, ϕ2.1 × ϕ4 × 0.25mm	AA
12-09	LX-WZ9064AFZZ	Washer, ϕ1.5 × ϕ3.8 × 0.5mm	AA
12-10	MCAMP0059AF00	Cam, End Gear	AC
12-11	MCAMP0067AF00	Cam Gear Assembly	AC
12-12	MLEVP0515AF00	Lever, Latch Release	AB
12-13	MLEVP0570AF00	Lever, Cam Lock	AC
12-14	MLEVP0571AF00	Lever, Sensor	AC
12-15	MLEVP0572AF00	Lever, Brake	AC
12-16	MLEVP0573AFZZ	Lever, Detection Killer	AC
12-17	MLEVP0574AFZZ	Lever, Brake Release	AC
12-18	MSPRC0449AFFJ	Spring, Latch Lock	AA
12-19	MSPRC0523AFFJ	Spring, Brake	AA
12-20	MSPRC0524AFFJ	Spring, Brake Release Lever	AA
12-21	MSPRD0628AFFJ	Spring, Pause Killer	AA
12-22	MSPRD0629AFFJ	Spring, Cam Lock Arm	AA
12-23	MSPRD0630AFFJ	Spring, Detection Killer	AA
12-24	MSPRT1124AFFJ	Spring, Lock Arm Return	AA
12-25	MSPRT1125AFFJ	Spring, Latch Release Lever Return	AA
12-26	NDAiR0183AFZZ	Turntable, Take-Up	AH
12-27	NDAiR0184AFZZ	Turntable, Supply	AH
12-28	NGERH0139AF00	Gear, Center	AC
12-31	NGERH0172AF00	Gear, Delivery	AC
12-34	XWHJZ47-02075	Washer, ϕ4.7 × ϕ7.5 × 0.2mm	AA
13	LDAiH0065AFZZ	Head Base	AC
15	LRTNP0058AFZZ	Retaining Ring	AA
16	LSLVM0189AFFW	Sleeve, Reverse Selector Lever	AB
17	MSPRC0538AFFJ	Spring, Play Lever Return	AA
24	MLEVF1711AFZZ	Tape Guide Lever Assembly	AC
25	MLEVF1759AFZZ	Lever, Reverse Selector	AF
27	MLEVF1713AFZZ	Lever, Pause	AA
29	MLEVF1715AFZZ	Lever, Play Release	AB
30	MLEVF1716AFZZ	Lever, Record Sensor	AC
31	MLEVF1717AFZZ	Lever, PAD Interchange	AC
32	MLEVF1718AFZZ	PAD Lever Assembly	AD
33	MLEVF1719AFZZ	Lever, Fast-Forward/Rewind	AB
34	MLEVF1720AFZZ	Lever, Pause	AC
36	MLEVF1721AFZZ	Lever, Stop/Eject	AA
37	MLEVF1722AFZZ	Lever, Fast-Forward	AB
38	MLEVF1723AFZZ	Lever, Rewind	AB
39	MLEVF1724AFZZ	Lever, Play	AB
40	MLEVF1725AFZZ	Lever, Record	AB
41	MLEVF1726AFZZ	Lever, Direction	AB
42	MLEVF1727AFZZ	Lever, Reverse	AD
43	MLEVF1728AFZZ	Lever, Holder Release	AA
45	MLEVF1730AFZZ	Lever, Switch	AD
46	MLEVF1756AFZZ	Lever, Main Lock	AE
48	MLEVP0502AFZZ	Lever, Pause Lock	AB
49	MLEVP0503AFZZ	Tape Guide	AB
50	MLEVP0561AFZZ	Lever, PAD Lock	AB
51	MLEVP0562AF00	Lever, PAD Prevention	AB
52	MLEVP0563AFZZ	Lever, Release Interlock	AB
53	MLEVP0564AFZZ	Lever, Record Release	AB
54	MLEVP0565AFZZ	Lever, Erase Prevention	AA
56	MLEVP0567AFZZ	Lever, Cycle Stop	AB
57	MLEVP0589AFZZ	Lever, Reverse Mode Selector	AC
58	MLEVP0588AFZZ	Lever, Cassette Holder Lock	AB
59	MSPRC0517AFFJ	Spring, Azimuth	AA
60	MSPRC0518AFFJ	Spring, Earth	AA
61	MSPRC0519AFFJ	Spring, Lever Return	AA
62	MSPRC0520AFFJ	Spring, Play Idler Pressure	AA
64	MSPRC0522AFFJ	Spring, Pause Lock Lever	AA
65	MSPRD0618AFFJ	Spring, Pinch Roller, Forward	AA
66	MSPRD0619AFFJ	Spring, Pinch Roller, Reverse	AA
67	MSPRD0620AFFJ	Spring, Tape Guide	AA
68	MSPRD0621AFFJ	Spring, Play Release	AA
69	MSPRD0622AFFJ	Spring, Over Strock	AA
70	MSPRD0623AFFJ	Spring, PAD Drive	AA
71	MSPRD0624AFFJ	Spring, PAD Lock Lever	AA
72	MSPRD0625AFFJ	Spring, Record Release Lever	AA
73	MSPRD0626AFFJ	Spring, Mode Selector Lever	AB
74	MSPRD0627AFFJ	Spring, Cycle Stop	AA
75	MSPRP0387AFFJ	Spring, Sub-Chassis	AB
76	MSPRP0388AFFJ	Spring, Cassette Pressure	AB
77	MSPRT1120AFFJ	Spring, PAD Return	AA
78	MSPRT1121AFFJ	Spring, Switch Lever, Fast-forward/Rewind Lock Lever	AA
79	MSPRT1122AFFJ	Spring, Main Lock Lever	AA
80	MSPRT1123AFFJ	Spring, PAD Prevention	AA
81	NBALS0006AGFJ	Steel Ball, ϕ2	AA
82	NBLTK0319AFZZ	Belt, Take-Up/Supply Turntable	AC
83	NBLTK0320AFZZ	Belt, Flywheel	AB
84	NFLYC0128AFZZ	Flywheel Assembly	AG
85	NGERH0168AFZZ	Gear, Flywheel	AB
86	NGERH0169AFZZ	Cam, PAD	AB
87	NiDR-0087AFZZ	Play Idler Assembly	AF
88	NPLYR0104AFZZ	Pulley, Center Flywheel	AD
89	NRōLM0073AFFW	Roller, Sub-Chassis	AD
90	NRōLY0070AFZZ	Pinch Roller Forward Assembly	AE
91	NRōLY0071AFZZ	Pinch Roller Reverse Assembly	AE
92	NSFTZ0127AFZZ	Pin, Reverse Lever	AC
93	PSPAD0054AFFW	Spacer, Record/Playback Head	AA
94	RHEDA0126AFZZ	Head, Erase	AN
95	RHEDH0137AFZZ	Head, Record/Playback	AT

REF.NO.	PART NO.	DESCRIPTION	CODE
96	MSPRC0532AFFJ	Spring, Tape Guide Azimuth	AA
101	MLEVF1757AFFW	Lever, Fast-forward/Rewind Lock	AC
102	MLEVF1758AFFW	Lever, Record Interchange	AC
103	LANGQ0971AFZZ	Bracket, Bias Switch	AC
104	MSPRT0838AFFJ	Spring, Cassette Holder Lock Lever	AA
501	XBPSD20P08000	Screw, ϕ2 × 8mm	AA
506	XBPSD20W10000	Screw, ϕ2 × 10mm	AA
507	XBPSD26P12000	Screw, ϕ2.6 × 12mm	AA
508	XBSSD20P04000	Screw, ϕ2 × 4mm	AA
510	XJBSD20P12000	Screw, ϕ2 × 12mm	AA
511	XJBSD26P34000	Screw, ϕ2.6 × 34mm	AA
512	XREUJ20-04000	Ring, "E"Type, ϕ2 × 0.4mm	AA
513	XREUJ25-04000	Ring, "E"Type, ϕ2.5 × 0.4mm	AA
514	XWHSD21-05040	Washer, ϕ2.1 × ϕ4 × 0.5mm	AA
515	XWHJZ23-05045	Washer, ϕ2.3 × ϕ4.5 × 0.5mm	AA
517	LX-BZ0328AFZZ	Screw, ϕ2.6 × 2.6mm	AB
518	LX-BZ0515AFFD	Screw	AA
519	LX-HZ0056AFFD	Screw, ϕ3 × 10mm	AA
520	LX-HZ0077AFZZ	Screw, ϕ2.6 × 10mm	AA
521	LX-NZ0171AFZZ	Nut, Azimuth	AB
522	LX-WZ5049AGZZ	Washer, ϕ1.7 × ϕ3.2 × 0.13mm	AA
523	LX-WZ9066AFZZ	Washer, ϕ1.2 × ϕ3.2 × 0.5mm	AA
524	XJBSD20P07000	Screw, ϕ2 × 7mm	AA
525	XBPSD20P05JS0	Screw, ϕ2 × 5mm	AA
526	XWHJZ21-05040	Washer, ϕ2.1 × ϕ4 × 0.5mm	AA
527	LX-HZ0155AFZZ	Screw, ϕ2.6 × 19.5mm	AA
528	XBPSD20P06000	Screw, ϕ2 × 6mm	AA
530	XBPSD20P04000	Screw, ϕ2 × 4mm	AA

CABINET PARTS

201	CPNLC1633AF01	Front Panel Assembly	AZ
201-1	HDECP0286AFSA	Decoration Plate	AP
201-2	————	Front Panel	—
201-3	LANGQ0962AFZZ	Bracket, Microphone Jack	AN
201-4	LANGQ0963AFZZ	Bracket, Record Level Control P.W.B.	AK
201-5	PFLT-0494AFZZ	Felt, Front Leg	AA
201-6	XJBSD30P08000	Screw, ϕ3 × 8mm	AA
202	GCAB-3178AFSA	Cabinet	AG
203	GCOVA1521AFSA	Cover, Cassette Holder	AH
204	GFTAC1397AFSA	Cassette Holder	AG
205	GiTAU0034AFZZ	Plate, Bottom	AE
206	HDECB0257AFSB	Decoration Plate, Record Level Control	AC
207	JKNBM0355AFSA	Button, Power Switch	AE
208	JKNBM0547AFSC	Button, Tape Selector/Dolby NR ON-OFF	AB
209	JKNBZ0247AFSA	Knob, Record Level Control, Left Channel	AD
210	JKNBZ0248AFSA	Knob, Record Level Control, Right Channel	AD
211	KCOUB0172AFZZ	Tape Counter	AG
213	LANGQ0936AFZZ	Bracket, Power Transformer	AD
214	LANGR0546AFZZ	Bracket, Power Transformer Retaining	AB
215	LANGT0979AFZZ	Bracket, Main P.W.B. Retaining	AB
△216	LBSHC0004AGZZ	Bushing, AC Power Supply Cord	AB

REF.NO.	PART NO.	DESCRIPTION	CODE
217	LCHSM0540AFZZ	Main Chassis	—
218	LHLDW1075AFZZ	Nylon Band, 60mm	AA
219	LHLDZ1259AFSB	Holder, Record Level Control	AE
220	LX-HZ0087AFFD	Screw, ϕ3 × 8mm	AA
221	LX-HZ0105AFFF	Screw, ϕ3 × 6mm	AB
222	MLiFP0018AFZZ	Damper, Cassette Holder	AD
223	MSPRD0553AFFJ	Spring, Cassette Guide, Right	AA
224	MSPRD0554AFFJ	Spring, Cassette Guide, Left	AA
225	MSPRT1083AFFJ	Spring, Cassette Holder Up	AA
226	MSPRT1146AFFJ	Rod, Record/Playback Selector	AC
227	NBLTK0327AFZZ	Belt, Tape Counter	AB
228	GLEGG0080AF00	Rubber, Rear Leg	AB
229	PGiDM0099AFSE	Cassette Guide, Left	AB
230	PGiDM0100AFSE	Cassette Guide, Right	AB
231	PRDAR0337AFFW	Heat Sink	AC
△232	QACCV0001AGZZ	AC Power Supply Cord, Europe	AL
△232	QACCB0059AF09	AC Power Supply Cord, England	AN
233	TSPC-1334AFZZ	Label, Specifications, with Indication "MADE IN KOREA"	AD
233	TSPC-1335AFZZ	Label, Specifications, Europe	AD
235	JKNBM0547AFSD	Button, Dolby NR B/C Selector	AB
△237	QLUGL0152AFZZ	Lug	AD
238	MRODM0096AFFW	Rod	AB
239	QFSHD1054AFZZ	Fuse Holder	AA
601	XHBSD30P06000	Screw, ϕ3 × 6mm	AA
602	XHBSD30P08R00	Screw, ϕ3 × 8mm	AA
603	XHBSD30P08000	Screw, ϕ3 × 8mm	AA
604	XHBSF30P06000	Screw, ϕ3 × 6mm	AA
605	XHBSN30P08000	Screw, ϕ3 × 8mm	AA
606	XHBSN40P08000	Screw, ϕ4 × 8mm	AA
607	XHBS330P06000	Screw, ϕ3 × 6mm	AA
608	XHMSF40P10K00	Screw, ϕ4 × 10mm	AA
609	XHSSD30P08000	Screw, ϕ3 × 8mm	AA
610	XJBSD26P10000	Screw, ϕ2.6 × 10mm	AA
611	XJBSD30P10000	Screw, ϕ3 × 10mm	AA
612	XJBSF30P08000	Screw, ϕ3 × 8mm	AA
613	XJBS330P12000	Screw, ϕ3 × 12mm	AA
614	XJSS330P10000	Screw, ϕ3 × 10mm	AA
615	XWHSD35-10150	Washer, ϕ3.5 × ϕ15 × 1mm	AA
616	XWSSJ30-07000	Washer, ϕ3 × 0.7mm	AA
617	XJBSD30P08000	Screw, ϕ3 × 8mm	AA
618	XHBSF30P08000	Screw, ϕ3 × 8mm	AA
619	XBBSF30P10000	Screw, ϕ3 × 10mm	AA
620	XNESD30-24000	Nut, ϕ3 × 2.4mm	AA

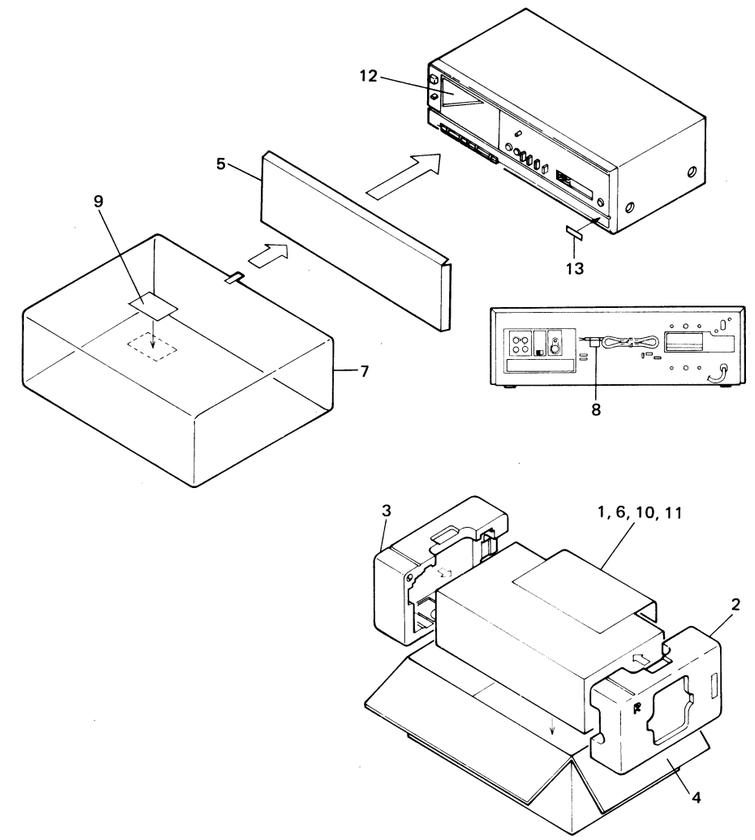
ACCESSORIES/PACKING PARTS

QCNW-0727AFZZ	Connecting Cord, DIN Type	AP
SPAKA1350AFZZ	Packing Add., Right	AF
SPAKA1351AFZZ	Packing Add., Left	AF
SPAKC3283AFZZ	Packing Case, with Indication "MADE IN KOREA", Europe	AM
SPAKC3284AFZZ	Packing Case	AM
SPAKP0274AFZZ	Protection Sheet, Panel	AA
SSAKA0104AFZZ	Polyethylene Bag, Operation Manual, England	AA
SSAKA0024AFZZ	Polyethylene Bag, Operation Manual, Europe	AA
SSAKH0054AGZZ	Polyethylene Bag, Unit	AB
TCAUH0056AGZZ	Caution Label, AC Power Supply Cord, England	AA
TCAUZ0039AFZZ	Caution Label, Polyethylene Bag, England	AA
TGANE1117AFZZ	Warranty Card, England	AB
TGANG1054AFZZ	Warranty Card, Europe	AA
TiNSZ0766AFZZ	Operation Manual	AE
TLABM0179AFZZ	Label, Special Feature, England	AC
TLABZ0505AFZZ	Label, MADE IN KOREA, England	AA
TMAPC1126AFZZ	Schematic Diagram, Europe	AA
TTAGH0371AFZZ	Tag, Europe	AC

PACKING METHOD (FOR UK)

SETTING POSITIONS OF SWITCHES AND KNOBS	
Reverse Mode Selector Switch	⊏⊐
Power Switch	STAND-BY
Tape Counter	"000"
Record Level Controls	0
Tape Selector Switches	NORMAL
Dolby NR-OFF Switch	OFF
Dolby NR B/C Selector Switch	B-TYPE
Mechanism	OFF
Input Selector Switch	LINE

1. Connecting Cord (DIN Type) QCNW-0727AFZZ
2. Packing Add., Right SPAKA1350AFZZ
3. Packing Add., Left SPAKA1351AFZZ
4. Packing Case SPAKC3284AFZZ
5. Protection Sheet, Panel SPAKP0274AFZZ
6. Polyethylene Bag, Operation Manual SSAKA0104AFZZ
7. Polyethylene Bag, Unit SSAKH0054AGZZ
8. Caution Label, AC Power Supply Cord TCAUH0056AGZZ
9. Caution Label, Polyethylene Bag TCAUZ0039AFZZ
10. Warranty Card TGANE1117AFZZ
11. Operation Manual TiNSZ0766AFZZ
12. Label, Special Feature TLABM0179AFZZ
13. Label, MADE IN KOREA TLABZ0505AFZZ



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